

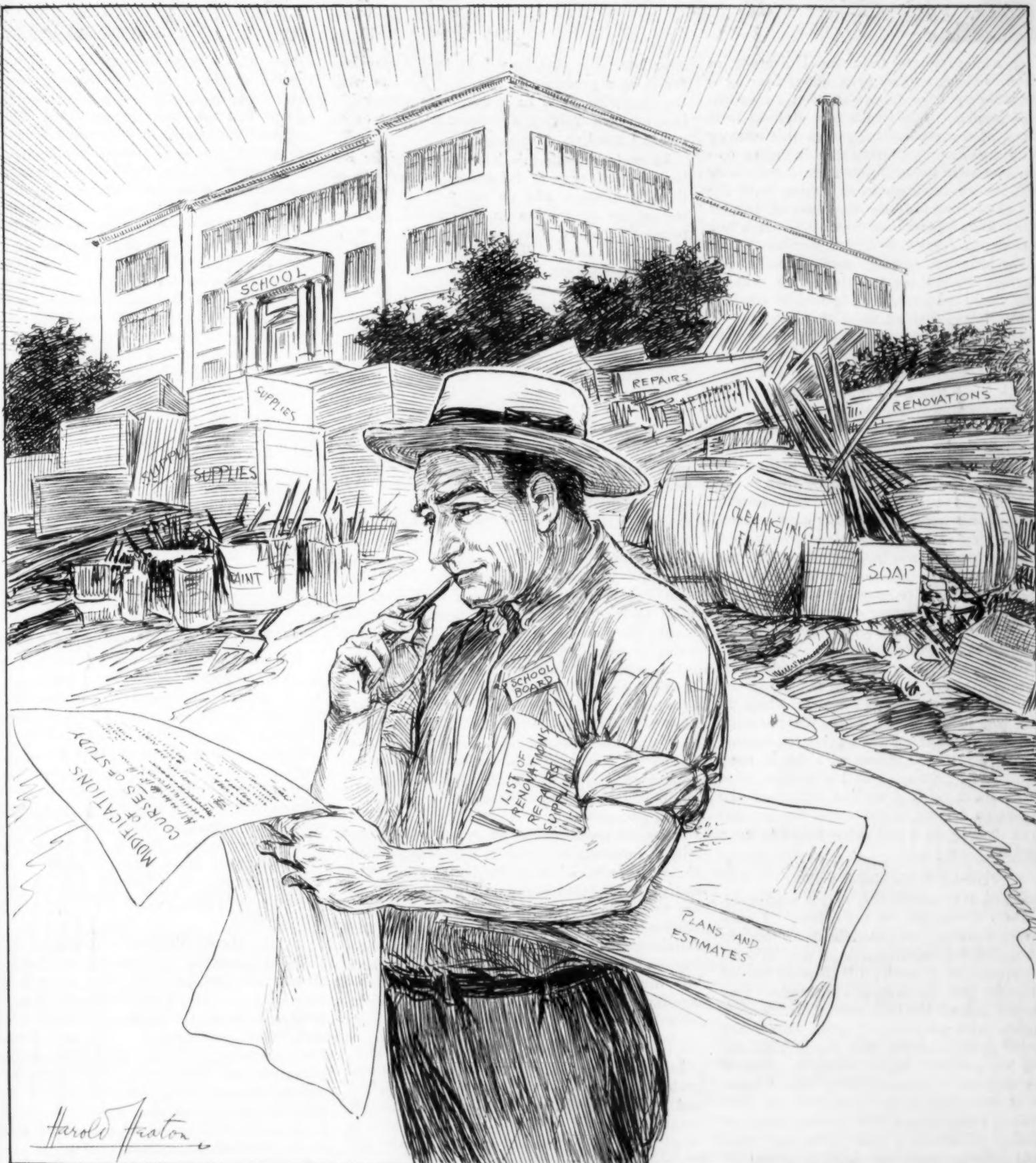
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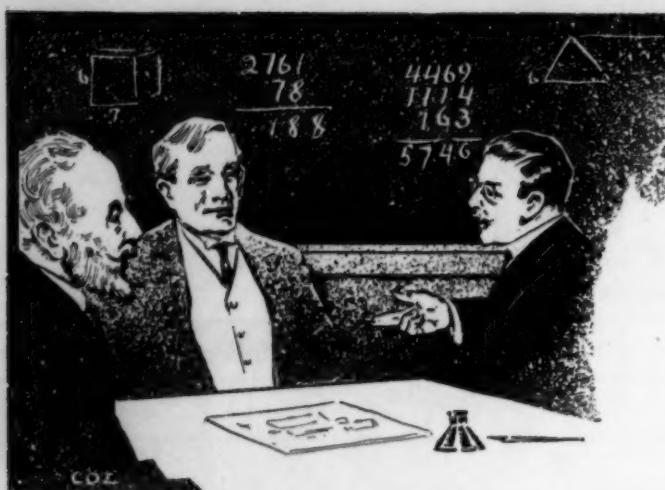
AUGUST, 1920

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MIDSUMMER PASTIMES FOR THE SCHOOL BOARD.

Just the Finishing Touches for the Fall Opening.



Teacher's Mission— Professional or Economic

C. R. Frazier, President, Idaho Technical Institute,
Pocatello

You may graduate from the University of London without attending a class, hearing a lecture, seeing a professor, or even seeing the city of London. You may take a diploma from any one of several institutions in this country by correspondence. During the influenza epidemic last year some of the more enterprising schools set up correspondence courses with the pupils thus covering the essentials of subject matter. This educational method is much less expensive. A few offices and typewriters would take the place of buildings and campuses and, aside from two or three directing minds, no high salaried teachers would be required to conduct the work of the institution or the system.

And yet no one would think of proposing to substitute correspondence courses for our present methods of instruction. Vital, daily contact with the living teacher is too essential for that, but there may be teachers who do little more than assign tasks and hear recitations. The teacher who does not teach but simply "hears lessons" has the consolation of knowing that his work is of no more value than a correspondence course. When you pass from a room or class where the methods of the teacher are wooden to a room or class taught by a real teacher, you cannot help but decide in your own mind that the pupils in our schools are not only entitled to be passed over the ground as outlined in the Course of Study, but *they* are entitled to rich intellectual and emotional experiences in the process.

These rich experiences will be provided only in instances where the teacher is thoroly interested both in the subject matter which he teaches and in the pupils whom he instructs. His pleasure in teaching will be doubled because of his double interest. Along with this he must understand the principles of his profession so that his work is really a work of art. And who would not go farther to see a real teacher and his work than to see a real artist painting upon the canvas?

Value of Professional Pride.

There is a type of teacher, may his tribe decrease, who apologizes for his calling. I once heard such a one say that his friends all thought he was foolish for teaching and he said he sometimes thought so himself; his hearers agreed unanimously that his friends were right. One who cannot assume the high calling of a teacher with pride, with professional pride, should not assume it at all, and one who has professional pride in his work will never consent to conducting his work on a correspondence school basis.

Just at this time in the history of our calling there is great danger that we shall lose our opportunity to become a real profession. And I should like to make my humble appeal to teachers to do everything possible to professionalize the teacher calling. If an attorney is asked for an opinion involving a question of law or jurisprudence he considers carefully his an-

swer knowing that he will be held responsible for it as a professional opinion. So also with the physician when he is asked for an opinion in a matter involving science or medicine or of medical practice.

In contrast with this how frequently we see instances of persons belonging to the educational profession who do not take seriously a request for an opinion on educational matters, responding either with a careless reply or with an "I don't know." This then will be another of the tests of our professionalism that within our proper sphere we shall regard our opinions as professional opinions.

Keeping Abreast with Progress.

Then too, we notice that the up-to-date physician, lawyer, or clergyman is a good reader along professional lines. He knows the contents of the periodicals and the best books in his professional sphere before the ink is hardly dry upon them and from time to time he breaks away from his professional practice to attend a series of lectures, a clinic, or a conference that may contribute to his professional growth. A similar attitude toward reading and other "means of grace" must characterize the professional teacher.

I have in my acquaintance many excellent men and women who regarding with suspicion some of the proposals of our professional proposers therefore allow themselves to doubt the value of up-to-date methods, contenting themselves with the belief that their own education is very educational and their own commonsense very common and that, therefore, they do not need to follow the idiosyncrasies of young Ph. D.'s who have contributed another scheme of measuring results of school effort, or who have conducted studies which are supposed to teach significant lessons to the student of the educational profession.

Unsound proposals are likely to be made and will of necessity be made in our struggle after the real truth and after the better way. This is true in all fields of progress. Even while we are trying to be scientific, the very method of science takes some recognition on the try and failure method. And he who would grow professionally must not be cynical of these methods but must be open minded, progressive and sensible. It is not the commonsense thing to taboo progress.

Professional or Economic.

Still another test I would make of one's real professionalism. In this day of organization and in this day of struggle to secure the proper compensation for services rendered, there is danger that our organization shall become less professional and more economic.

Charged as we are with the proper education of the minds and hearts of the children and young people of our great state, shall we not rather emulate the organization of the practicing phys-

icians who give the greater part of their attention at the different sessions of their organization, to clinics and professional lectures rather than the economic aspects of their calling; and shall we not further emulate the ethics of this noble profession which would frown upon one of their number who refuses a professional call because of the poor financial status of the patient?

Just so shall we not frown upon the member of our profession who does nothing more than the letter of his contract calls for and who fails to contribute that overplus in the way of professional service that would tend to mark his services as professional first and economic afterward. The very nature of our calling is such that he who would find his life must lose it.

Undermining Professionalism.

We must serve wholeheartedly and disinterestedly first and after making sure of this fact, can with perfectly good conscience insist upon fair treatment financially. It would be rather difficult, I believe, to prove that the medical profession has suffered financially because of its professionalism. We are naturally and vitally suspicious and distrustful of the commercializing medical syndicate. And teachers who put the economic consideration first and the professional consideration of high scholarly and skillful service second, and any organization of teachers which do otherwise are doing more than a little to undermine our profession.

My last suggestion is not to the teachers but to the administrators, to those possessed with authority delegated them by the community or the state for the employment and general over-control of the schools. To such, I would say that just as no one man or small group of men have a right to tell a doctor, a lawyer, or a dentist that they think he has been in the community long enough and it is time to move to some other town, giving no reason save that it is their august will that it be so; so no man or small group of men have a right to give a similar message to a teacher who has thru a series of years done successful work in a teaching position.

Hasty Dismissals Unwise.

There is something in the theory that a man should own his job. At least as one labors year after year at a given occupation in a given locality he naturally builds up a claim of tenure that should be respected. Arbitrary dismissals from teaching positions with little or no explanation and often with no opportunity for self-defense, are doing probably more to undermine our profession than any other single influence, unless it be the unprofessional attitude of the teachers themselves.

I would condemn as unsound and unjustified the dismissal of teachers over night, as it were. The presumption should be in their favor and the burden of proof as to unfitness or incom-

(Concluded on Page 88)

The School Board in City School Survey Reports

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A topic usually discussed at some length in city school survey reports is the "School Board." Since the material on this topic is scattered thru a score or more publications, the writer has endeavored to bring together in the following article the principal recommendations of school survey committees in regard to city boards of education.

Board of Education Necessary.

So seldom is the need of a board of education questioned and so few are the cities where there are no boards of education that most school survey reports are silent on the matter.

The Cleveland Survey Staff, commenting upon the view held by a few persons that it would be a good plan to have the city officials employ a director of schools who would have something of the same relation to the city commission or council as exists between the chief of police or the chief of the fire department, says in effect:

"If the proper work of the board of education were to deal with a mass of routine business detail this view would be sound and the board of education might be dispensed with. However, a board of education is needed, not to conduct business details but to formulate policies. It is the opinion of the survey staff that educational government is more likely to be flexible and adaptable if it has the advantage of lay counsel than if its policies are exclusively decided by its professional officials and that in the conduct of public education the function of the layman is to moderate the transports of the experts."

The committee that made a survey of the schools of St. Paul, where there is no board of education, favored having the schools of that city managed by a board of education instead of by one of the city commissioners designated by the mayor for this particular service after the commissioners have been chosen. The survey report, while it shows that the relationship between the commissioners and the superintendent is most satisfactory, points out that, since the term of the commissioners is only two years, there is likely to be a lack of continuity in educational policy with an accompanying unrest and even unwillingness to exert a maximum of effort for the realization of the administration. It is recommended that, if there is to be a commissioner of education, he should be elected for a term of at least four years, not as one of a group of commissioners but for the particular office which he is to occupy. The survey committee says, however, that it wishes to place itself on record as favoring the control of public education by a board of education.

Selection of Board.

A board of education being necessary, the question is often asked, How should a board be created, by appointment, by the mayor, city council, or elected by the people? The school survey reports are not unanimous in reply, the majority, however, came out definitely for an elective board.

The New York City School Inquiry Committee answers: "In such a way as to secure the educational leadership of the best possible persons, and to free them entirely from partisan or personal obligations of every sort, manner and form. Impersonal mayors are rare, and the best boards of education seem to be selected by a direct vote of the people themselves."

¹New York City; Portland, Oreg.; Salt Lake City, Utah; San Antonio, Tex.; Cleveland and Elyria, Ohio; Leavenworth, Kan.; Janesville, Wis.; South Bend, Ind.; St. Louis, Mo.; Denver, Colo.; Memphis, Tenn.; San Francisco, Cal.; Butte, Mont.

The Cleveland survey report after calling attention to the fact that school board members should be elected at a special school election, says: "Another device for securing the same results is to have the board members appointed by the mayor or elected by the city commissioners instead of having them elected by the people. Under a commission form of government, election by the commissioners gives exceedingly satisfactory results, but under the ordinary form of city government popular election on a special election day is probably the best plan."

The San Francisco report is the only one that suggests that the school board be appointed by the judges of the court. It recommends that the board be elected by the people, or appointed by the mayor and confirmed by the board of supervisors, or appointed by the judges of the superior court. Possibly the reason the judges are suggested is that the city and the county of San Francisco constitute one school district. The recommendation, however, is unusual.

The survey reports are unanimous in their recommendations regarding election at large. The staff that made a survey of the schools of Janesville, Wis., where two board members are elected at large and one member from each ward, emphatically declares that the present method is antiquated and should be abolished at the first opportunity. The staff says further: "Selection by wards cannot be justified under the pretense that the interests of a given ward will be better taken care of under a system of ward representation. Ward interests see things with one eye and that only partly open. The point to be considered is that the present form of organization lends itself to ward manipulation. Another condition resulting from ward selection which is perhaps equally bad is that which automatically prevents the selection of some of the city's most able men for membership on the board."

Salt Lake City is urged by the school survey staff to elect board members at large. The report reads: "However well it may have worked in Salt Lake City, the ward system is nevertheless undesirable and has been abandoned by many cities. The almost universal experience has been that board members have averaged higher from the city at large than when elected along ward lines, and petty local politics and local feelings influence the board less in its actions. The school system of a city is a unit, and board members should represent this larger unit and not some portion of it."

How to keep petty selfish politics out of school board elections even when the members are elected at large is a problem that has not been solved in many cities. The Cleveland Survey Staff recommends that the school board be elected at a special election, for in the excitement of the general election the welfare of the schools becomes temporarily a matter of minor consideration because obscured by political interests. The staff calls attention to the fact that many cities have found special elections for school board members, a great improvement over the old way.

The Memphis school survey staff, after calling attention to the municipal machine politics in which the schools of that city have been caught recommends a unique plan for nominating candidates for the board of education. The recommendation is: "It would seem desirable that the matter of nominating candidates for boards of education should be intrusted to a large committee perhaps 100 in number, made

up of representative men and women chosen for the purpose from the various civic bodies in the community which are working in a nonpolitical way for the betterment of conditions and for the progress of the city. Such a committee, coming together for the purpose of inviting representative men and women of the community to stand before the public as candidates for a place on the board of education and guaranteeing such candidates their support, would serve to induce men and women to take places on the board who, under present conditions, with various tickets in the field, backed by political machines, would be unwilling to permit their names to be used."

Size of School Board.

School surveyors agree that the board of education should be small, but there is some difference of opinion as to the number of members that should constitute a board. The School Survey Report of South Bend, Indiana, where there are three board members thinks that this is a good number. The Salt Lake City report recommends that the board in that city be reduced from ten members to five. The reasons given are: "A board of five, one that could meet in a smaller room and around a single table, and with more board and less committee action would handle the educational business more quickly, more expeditiously, and more efficiently than a board of ten members, and with fewer conflicts with its executive officers and fewer reversals of action. A large board almost always leads to unnecessary discussion, and often has to reverse itself."

The Memphis survey committee, on the other hand, believes that a board of seven is better than a board of five, saying in support of the suggestion: "The Memphis school board might well be increased from five to seven members. It is too easy in a board of five for four to pair off on questions of policy, leaving the fifth holding the balance of power and often in practice determining the policies of the board. It is not so easy with a board of seven members to hold a uniform alignment of members which permits a single individual to determine the board's action."

One argument sometimes advanced in favor of a large board is that a board should be representative of the many points of view and of many vocational and social classes. On this point the South Bend report makes clear the absurdity of such argument, saying: "As a matter of fact, even a large board of twelve or fifteen members, can personally represent but a few of the many social and vocational classes in the community. The way to take care of the many points of view is not to fill up the board with a large number of men; it is rather to choose carefully a very few men of sound judgment who know the community and the needs of the community, and where business or other affiliations are not such as to limit their independence or judgment. These men can then at open meetings hear the claims of every interested class."

The question is sometimes asked: Should not a large city have a large board? The New York City school inquiry committee answers: "The theory that a big city must have a big board is a patent absurdity. The big city must have a small board, because its school business is big and demands informed, united, and energetic action on the part of those who conduct it." The report points out that if the board is large, business is transacted thru committees and that the decisions of the board are

not based upon the informal and deliberate judgment of the whole body.

Tenure of Board Members.

The survey reports making recommendations regarding the tenure of board members would have the term of office from four to seven years, with one member retiring or coming up for re-election each year, or at least not more than two members retiring at a time.

The Leavenworth, Kansas, survey report discusses as follows the generally accepted reasons for a long term: "Frequent elections under the old system (two year term) led to many short terms, and consequently to a lack of the necessary continuity of service to produce high efficiency. The new method of election for four years is sure to work a helpful reform along this line.

"There are two weaknesses inseparable from short terms in public service corporations. One is that the duties required are so complex that the novice may assume little responsibility and become a figure-head. The other is a far more serious danger. It is generally recognized that in a democracy like ours the most dangerous man, whether in politics, religion, business, or the schools is a man with convictions and no knowledge. This applies especially in reform movements, churches and schools, where every one has pretty clearly defined feelings and convictions."

In Memphis the terms of the five members of the board expire at the same time. The survey report says in regard to the practice: "This means that a new board may come into force knowing nothing about the schools or about the policies inaugurated by former boards and which it may be highly desirable to retain. Under the present arrangement it is too easy for a new board unwittingly and thru ignorance of conditions to allow policies to lapse which have been inaugurated only after strenuous endeavor. Furthermore, the school corps is always uncertain as to a continuation of policies already entered upon."

The Memphis survey staff would have a six year term for each board member; Elyria, Ohio, a five year term; St. Paul, a five or seven year term. In all the reports examined none advocates that the term be shorter than it is in the city surveyed.

The Paid Board.

It is doubtful whether any student of school administration favors a paid board of education, and it scarcely seems necessary to refer to the matter, yet every now and then a layman advocates paid boards. Only recently a former prominent school board member publicly advocated that the school board in his city should be composed of three members and paid a salary so that they could devote all their time to the schools. So seldom is the paid board found, and so seldom is it given any thought by students of school administration that the survey reports are with few exceptions silent in this matter. For some reason the New York school inquiry committee when discussing the organization of the school board asked the question: Should the members of the school board be paid? The committee answers its own question: "Most emphatically no. The experience of the United States is against such an arrangement for the conduct of the schools. The paid board puts the management of public education into the hands of laymen; it belongs to experts. The services of the best citizens cannot be purchased for this purpose, and the lay service that is purchasable is not wanted if the interests of education are to determine the character of the board."

Only two school systems whose boards of education are paid have been surveyed. Memphis, Tennessee, and San Francisco, California. Un-



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(See page 79.)

der the present arrangement in Memphis the president of the board and chairman of the committee on buildings and grounds receive an annual salary of \$600 each, and each of the other members \$480. Tho the pay is small the survey committee says: "Unfortunately, even the paying of but a nominal fee attracts some who but for it would not be interested in the work of the board. Obviously, people who have no more interest in the schools than this should not be permitted to take office. On the other hand, experience shows that the public-spirited citizen who has the welfare of the schools at heart will not be deterred from serving on the board of education thru a failure to pay a salary or fees."

The San Francisco survey report calls attention to the fact that paid boards are rare and that no student of school administration favors the plan. It emphatically recommends that the plan of paying the school board in San Francisco be discontinued.

Powers of School Board.

While the school survey reports emphasize the fact that education is a state and not a municipal function, none of those that discuss the relation of the city school district to the state would have state oversight and control destroy local initiative and local efficiency.

The San Antonio, Butte and Portland and other reports declare that certain functions are often performed by the state that would be better performed by the school board and the superintendent. The selection of textbooks is given as one example.

The Portland survey committee would have a general law in Oregon for cities of 20,000 or more population. It would have the state provide a good modern educational organization for such cities, specifying only the main powers of the board, the superintendent of schools, the superintendent of properties and the clerk or secretary. In the opinion of the committee the right should be granted to the city school district to make its own course of study, to adopt its own textbooks, to set its own requirements for entering the teaching service, to contract with its own teachers, and to establish such schools and such types of educational activity as seem needed, and to determine the rate and amount of school taxes to be levied up to certain maxima for buildings, equipment and annual maintenance.

The survey reports of Cleveland and Elyria, Ohio, show to what extent these cities are hampered by too detailed state school legislation. The Cleveland survey staff reports: "The law

has allotted to the board of education a multiplicity of duties so time-consuming and energy-consuming that there is but little time left in board meetings which the members may devote to the discussion of policies.

The Elyria report discussing the tax law which limits all city expenditures for current expenses to 10 mills of which the schools may have not more than 5 mills says: "If the state legislature considers that city officials should not levy more than 10 mills, it should at least permit the electors of a city to vote whether the tax rate can be more than this amount. The people of any city can surely be trusted not to tax themselves beyond their willingness to pay and should be permitted to support as generously as they will the schools for the education of their children."

There is practically unanimous agreement that one of the powers that should be granted school boards is to levy taxes or to determine the amount of funds needed without interference from any other body. The Leavenworth, Kansas, report declares that from a comparative standpoint, the most important power lodged with the board in that city is the levy of taxes.

It is the belief of the Portland school survey staff that the right of taxation for school purposes should be lodged with the board of education up to a maximum with the further right to submit the question to a vote of the people, if, in their judgment, still larger sums are needed to meet emergencies or special educational needs.

School surveys have been made in several cities where the estimates of the school board may be revised by some other body as the city council. It is interesting to note what the surveyors have to say in regard to this practice.

The Memphis, Tennessee, survey report says in no uncertain way:

"The charter should be changed so that the board of education may levy taxes for the support of the schools. The board's limitations in this important respect means, of course, that it is not an independent body. It has neither full and final power, nor full and final responsibility, in its control of the schools, for its estimates of the amount needed for the support of the schools is passed in review by the city council, which may or may not grant the amounts called for. Thus the power of the board of education to carry out its plans for the extension and improvement of the schools depends upon the action of an independent body which can have no such intimate knowledge of the schools' needs as has the board of education. The board of education, therefore, is unable to formulate any definite policy with the certainty of being able to put it into operation; and, as a consequence, it cannot properly be held responsible for any inefficiency of the school system which may develop." The San Francisco school survey report, discussing the general powers of the board of education, says: "The board of education of San Francisco ought to have, thru its proper officers, full control and management not only of all its educational activities but of its business and financial affairs as well; it should not only make its own budget, but it should have power to make the school levy; it should not only select and purchase school sites, but under the guidance of its proper technical experts; it should plan and construct school houses and make all necessary repairs to the school plant." In other words the survey staff would give to the board of education full power to control and manage, through its proper officers, everything connected with the management of the public school system. The report continues: "This will tend not only to

give the board of education power—it will tend also to give it dignity in sight of the people. Finally, such a plan will make it possible for the people to fix responsibility for efficiency or inefficiency in the conduct and management of school affairs."

Organization of the Board.

School survey reports have little or nothing to say in regard to the organization of the board excepting the work of standing committees. The general opinion is that there should be few or no such committees.

The Janesville, Wis., survey staff says: "With a small board there is little need for standing committees. The present board is to be commended for having reduced the number of these. Too often committees undertake work which should be left to the professional judgment of those whom the board employs to manage its school system. On questions of importance the board as a whole acts." The survey staff suggests that when important matters of policy such as a building program, methods of financing the schools, etc., arise it may be desirable to appoint a temporary committee with whom the superintendent may discuss in a preliminary way his proposals in these matters of policy.

Discussing the places of a teachers' committee which many school boards consider the most important one, the Janesville report makes the following observations: "Under the regulations previously in effect the most important committee was that on teachers. Recommendations on the election of teachers were made to the committee by the superintendent and then by the committee to the board. This is not the most satisfactory procedure. The superintendent is employed because of his professional ability to judge the fitness of teachers and to him should be left entirely the matter of recommending them. He and not the committee assumes the responsibility for their success or failure. The function of the committee is more properly that of discussing with the superintendent the schedule of salaries and the number of teachers to be employed."

The Salt Lake City survey committee declares that business will be transacted better if all committees are temporary, and if the board acts on the recommendations of its executive officers first and finally as a body.

What should the committee of a board of education do, is answered by the New York school inquiry committee as follows: "In order that the board may function as a whole, the number of committees must be as few as possible, and their authority must be limited to the initiation of action by means of recommendations and suggestions, and not be allowed to extend to the final disposal of business, except where specific matters are, from time to time, referred to them for decision by the board as a whole. In no other way can the board retain for itself the function of administering the schools for which it, and not the committees, was created by the people."

The Elyria, Ohio, report states that every committee could be abolished without lessening the efficiency of the board as a legislative body.

It is recommended by the San Francisco survey staff that the number of standing committees be reduced to two of four members each, one on business and one on education. This recommendation was made because of the abuse of the committee system in San Francisco. The report calls attention to the fact that the chairman of several committees have unusual powers, transacting business directly with supervisors, principals, and teachers in the schools, or taking the initiative in recommending appointments quite independently of the superintendent of schools.

Practically every school survey that treats of the committee system points out the need of few or even of no standing committees, and recommends that even where there are committees, the board study the reports of the committee and act as a body.

The School Board and the Superintendent of Schools.

The one phase of school board administration most discussed on school survey reports is the relation of the board to the superintendent. The Denver school survey report no doubt sets forth more clearly than any of the other reports what this relation should be. The Denver survey staff emphasizes the fact that the best principles of business management applicable to a business corporation and the principles that should govern the business management of a public school corporation are the same. It is pointed out that the function of a board of education is in every way identical with the function of a board of directors of a business corporation; that the principles of good management in the school world are identical with the principles of good management in the business world. For purposes of comparison and to impress this analogy the Denver survey report sets forth in parallel columns the principles of administration which govern the two types of corporation-business and education. Of eleven principles of management applicable to a manufacturing corporation employing 1,500 people it is shown that exactly the same principles are applicable to a school corporation employing 1,500 people.

Many school survey reports discuss not only the relation of the board as a whole to the superintendent but the relation of individual board members to the executive and teaching staff, since most troubles between a board of education and the superintendent of schools arise from the meddling of some individual board member.

The Memphis report states a principle accepted by all students of educational administration and by all successful business corporation boards: "The fact that boards of education, as individuals merely, have no more authority in school matters than have citizens of the community is frequently overlooked both by members of boards of education and by citizens and teachers. Only in their official capacity as members of a corporate body, duly and properly elected by the citizens of a community, have board members any peculiar authority or jurisdiction, and yet the reason which impels citizens, teachers, and others to take their troubles to individual members of the board is the thought that such individuals, by reason of the fact that they chance to be members of the

board of education somehow have greater powers than other individuals in the community."

Many a school board would avoid much trouble and would give the superintendent the power due him if it would refer all persons seeking favors and all with complaints to the superintendent before action is taken by the board, much less by individual members, is the opinion expressed in several survey reports.

On this point the Butte, Montana, survey committee speaks: "Book agents, supply agents, applicants for teachers' positions, disgruntled teachers and principals, and all others seeking favors in the school department, should at once be referred to the superintendent of schools, with the simple statement that the board makes it a rule to take no action in such matters except upon his recommendation. When this is understood by the committee, the board members will be saved the waste of much valuable time, and the efficiency of the educational service will be greatly improved."

Every school survey report recommends that the school board confine its work largely to matters of policy and that it leave matters of detail to the superintendent and his assistants.

The question is often asked: What is there for a board of education to do if the superintendent runs the schools? The Portland surveyors answer: "This leaves the board free alike from the strong personal pulls and influences and from petty details of school administration, with time to devote to the larger problems of its work. These relate to the selection of its expert advisers, upon which much time and care should be spent; the larger problems of finance, present and future; the selection of school sites, always with future needs and growth in mind; the approval of building plans; the determination of the budget of expenses; the final decision as to proposed expansion and enlargements of the educational system; the prevention of unwise legislation, and the representation of the needs and policies of the school system before the people of the city and of the state. These larger needs are far more important, but are almost sure to be neglected if a board of school directors attempts to manage too minutely the details of school administration."

After reading thru the several school survey reports no one can ask what there is for a board to do even after it has turned over all matters of detail to executives. The survey reports all emphasize the fact that the work of the board would be placed on a higher plane if it would give its attention to big things—to a careful consideration of policies.

Only One Executive Head Needed.

Practically all the recommendations found in survey reports in regard to the relation of the school board to the business manager of the school system would have him work under the supervision of the superintendent. In other words they recommend but one head.

The Cleveland survey staff says in regard to this point: "The proper form of administration is one which places the superintendent as the executive head of the entire school system and gives him coordinating power over all departments, subject always to appeal to the board in case of fundamental disagreement. The superintendent should be the real head of the school system as well as its titular head. If the schools do not succeed, if there is trouble in their management, or if the people are dissatisfied with their work, it is the superintendent who is held responsible. Since he is held responsible for results, the executive head of the other departments in the school system should be under his ultimate authority and control."

The staff declares that the effort to classify school problems into financial and business on the one hand and educational on the other re-



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sults in having two groups of problems everywhere overlap and intermingle.

Several illustrations are given in the report to show how the two departments overlap. For instance, athletic events and games are part of physical training subject to the supervision of the educational department. Athletic coaches are authorized by the superintendent. Permission to use gymnasiums and playgrounds for athletics outside regular hours must be secured from the business manager.

The Portland survey committee makes the same recommendation for Portland, saying that the present independence of the two departments ought to be replaced by centralization into one department, the educational, with sub-departments under proper executive heads.

On this point the New York City school inquiry committee says: "The board of education must employ a general manager. This whole department and all that it includes are for purposes of education. When a man is wanted to manage a bank, a banker is selected. When a man is wanted to operate a railroad, a railroad man is chosen. And when a man is appointed to conduct an educational business, an educator must be chosen. The one who is expert in the work which is sought to be done must direct it. The others on the staff are contributing factors." The St. Louis survey committee, while advocating that there be but one head to the

school system, says that the lack of friction among the several departments in the St. Louis schools is, no doubt, largely due to the fact, that while there is no regular executive head to the school system, the several departments are so organized that they are not likely to come in conflict with each other, and to the fact that at the same time skillful provision has been made by the board of education to unite the departments at all points where they might disagree, to the harm of the essential work of the system, which is education.

The San Antonio report considers the question of the subordination of the business manager to the superintendent of schools of importance only so long as management is personal and arbitrary. It is pointed out that in proportion as management becomes the application of impersonal scientific standards, the problem of the official subordination of the various individuals diminishes in importance, that this problem is transmitted into the problem of the coordination of specialists of equal rank, that the business agent then becomes simply one specialist among many, each having his special division of work, and that subordination is not a question that often needs be considered.

No doubt the majority of the survey reports that recommend but one executive head know that only in rare instances is management im-

personal. They also consider the superintendent of schools the person to coordinate the work of the several specialists.

Summary.

The most important recommendation found in city school survey reports regarding the board of education may be summarized as follows:

1. A board of education is necessary.
2. The board should be elected by the people.
3. The board should be small with a membership of about five or seven elected at large for a term of from five to seven years.
4. The board should be unpaid.
5. City schools should be under state control, but the school board should not be hampered in its work by detailed state laws; it should have freedom to develop as good a school system as the people of the city want.
6. The school board should be independent of the city officials and have power to levy taxes with certain limits.
7. There should be few or no standing committees.
8. The school board should confine itself to matters of policy and employ a superintendent and others to execute details.
9. There should be but one executive head to the school system and that head should be the superintendent.

AEROLOGY OF THE CLASSROOM

Dr. C. E. Hill, Acting Chief of the Bureau of Sanitation, Department of Health, Chicago, Ill.

Let us begin by endeavoring to end the use, or perhaps I should say the misuse of certain words and terms that long since should have become obsolete. I refer to the word "ventilation" and to such terms as "fresh air," "foul air," "stale air" and the expression "not enough ventilation," or "too much ventilation," "this room is close," etc., all of which are unscientific, meaningless and frequently misleading. We can without undue exercise of the imagination consider words as living things. They have character and individuality; they have a period of youth when they have a limited meaning, except to their parents or immediate friends. Some of them develop into virile manhood and become a positive force in our life and strongly influence our actions.

Some words always ring true, like "love" and "patriotism"; some are essentially false, conveying a different meaning to different individuals. Words also grow old and feeble, having then little usefulness, and finally they die and are forgotten. Doubtless many of my readers can recall words that have become useless, that now convey the wrong meaning, or words the meaning of which has entirely changed. "Ventilation" is an illustration of a certain class of words having a definite meaning, due to their derivation from a dead language. In words of this kind the meaning is more or less fixed or circumscribed by the Latin root which does not change. The meaning we wish to convey, however, has undergone a great change during the last decade.

The Latin word "ventilatus" is an infinitive meaning "to blow," "to blow gently to and fro," etc., and the word was evidently selected more than a century ago to describe a certain phenomenon, namely, that of introducing air into a room or given space. Today the fact is quite generally realized among those conversant with modern ventilation practice that the blowing of air into a room is the smallest part of our problem when we wish to produce satisfactory air conditions therein, but to the novice and to the

layman the original meaning of the word remains and carries its original conception, so that what we really mean when we use this word is not understood by the layman as we intend. Perhaps I can illustrate this fact by relating a personal experience.

The Layman's Understanding of the Word.

A couple of years ago the writer was placed on the witness stand to testify as an expert in a street car ventilation case. It was a case where an alderman had been forcibly ejected from a street car in Chicago because he refused to enter the body of the car and insisted upon riding on the platform. The street railway company had recently promulgated strict rules forbidding this practice, but it was during the influenza epidemic, the car was crowded and insufficiently ventilated and the alderman refused to enter the same. He brought suit against the company, claiming the right to ride on the platform because of the insanitary condition of the car interior. It was necessary, therefore, for me to establish the fact that the car was improperly ventilated.

I testified, after being given the number of the car, the number of occupants, etc., that it was not and could not be adequately ventilated in accordance with the requirements of the ordinance. On examination by the street railway company's attorney I was asked the following question:

"Dr. Hill, you stated in your testimony that this car was not properly ventilated?"

"Yes."

"You were not on the car at the time?"

"No."

"How do you know then that it was not adequately ventilated?"

I said that I had in my office drawings and specifications of every car in Chicago; I knew exactly of what the equipment consisted, and having tested all these various types of cars I was in position to know whether or not it could be adequately ventilated with the equipment and under the conditions set forth.

"Supposing," said the attorney, "that a window had been open a short distance in the front of the car, would the car then have been adequately ventilated?"

I answered "No."

"Supposing," he said, "the window was wide open would the car then be adequately ventilated?"

I again answered "No."

"Supposing doctor," the attorney continued, "all of the windows in the car were open would the car then be adequately ventilated?"

I again answered "No," altho the jury and the entire court room was smiling at the apparent foolishness of my statement.

"That is all," said the attorney, and I left the stand very much embarrassed and after having done the alderman's case an irreparable injury.

Word Ventilation Should Be Discarded.

You understand the situation. The street car company's attorney, the jury and the people in the court room considered ventilation simply as a question of introducing air into the car, hence my apparent inconsistent testimony. I was thinking of ventilation not as introducing air only, which I consider not the most important part, but the maintaining of a comfortable temperature, freedom from objectionable drafts, freedom from dust and bacteria in the air, and the other important factors all of which go to make up ventilation as a whole.

This experience taught me a valuable lesson that I remembered some time later while testifying under somewhat similar circumstances. The second case related to the ventilation of a private school and the opposing attorney asked me if a certain classroom, under the hypothetical conditions stated, was properly ventilated. I replied by asking him what he meant by "properly ventilated." His response was "What do you mean by 'properly ventilated,'" and I told him, incidentally I told the jury as well and the case was won without serious difficulty.

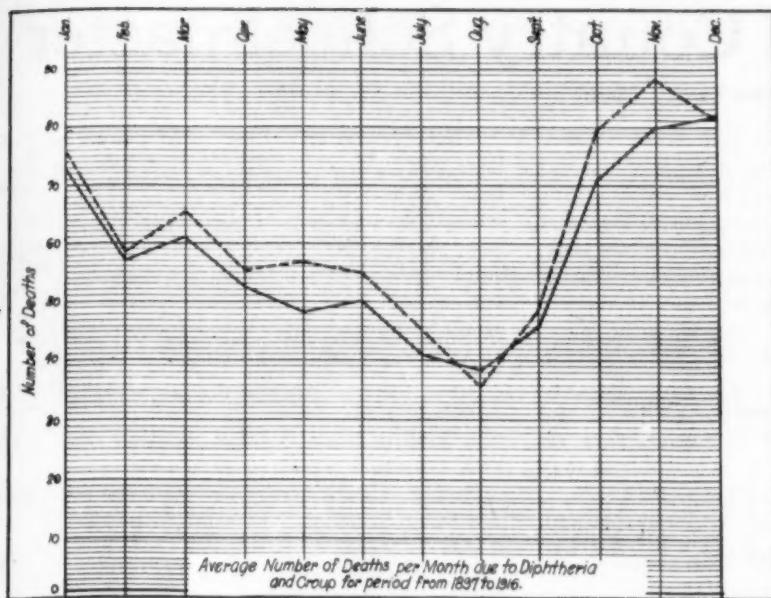


Figure 1.
AVERAGE NUMBER OF DEATHS IN CHICAGO DUE TO TWO IMPORTANT DISEASES.

So I say to you that the word "ventilation" should, in my judgment, be discarded and its place filled with a new word or term, one that actually means what we mean; what we intend to convey when we use it, a word that does not carry with it false ideas and old misconceptions that mislead the public, and retard the progress of the science. Let us, therefore, discard it as a scientific term and give it to the open-window enthusiasts who use it so glibly and abuse it so outrageously.

"Fresh" and "Foul" Air.

This is not the only word or term encumbering our nomenclature. "Fresh air" is another offender. What is meant by "fresh air?" The dictionary defines "fresh" as something newly prepared, not stale or old. Freshness is a property of substances that deteriorate with age or under certain unfavorable conditions. This is not the case with air. Air is a definite mixture of gases, which are elements, which do not and cannot change thru all the ages. If some alchemist thousands of years ago had filled a clean glass container with air and placed it down in the depths of the pyramids and if we should resurrect it today the air would be as pure and clean as on the day it was placed there and it would be just as *fresh*. The word is false in this application. When we say "open the window and allow some fresh air to enter," we mean usually some cool air, possibly some clean air, but freshness is a quality that does not apply. Not only is the term improper but it conveys a wrong idea when it is used. People gain the impression that all outdoor air is fresh and consequently desirable. In so viewing the subject they see no necessity for a correct understanding or control of the real factors that determine air conditions in a room, such as proper temperatures, humidities, cleanliness, air motion, etc.

"Foul air" is another term which should have long since been discarded. What is meant by foul air? Most people believe that air that has been breathed by the human being is necessarily foul and polluted and that foul air and respired air are synonymous. What actually happens, however, when a normal, healthy individual breathes? The air in passing to and from the lungs thru the nostrils and respiratory tract, passes over a surface lined with a moist membrane covered with cilia or hairs that cleanse it of all dust, bacteria and similar impurities. This is nature's air washer, the efficiency of which we have long striven without success to equal. The lungs take out a portion of the oxygen from the air and give back to it

a certain amount of carbon dioxide gas. The expired air is also saturated with moisture, but the amount of oxygen removed is small and the amount of carbon dioxide gas given back is not sufficient in quantity to materially affect the purity of the air.

A New Nomenclature Needed.

Please note, therefore, that the respiratory activities of two or three healthy persons in an ordinary living room reduces the dust and bacteria content of the air, increases its moisture content without perceptibly impairing its other desirable qualities, and it is unquestionably a true statement that their temporary sojourn in the room improves the air conditons rather than the opposite. True, their continued occupancy in the room will unfavorably affect the air purity, the moisture content will be slightly increased, the temperature will also increase until the wet bulb is too high for comfort, and the necessity of introducing cooler air of a lower humidity will be apparent, but it is not in any sense a question of foul air, and the term is improperly used.

Contaminating influences from other sources, such as tobacco smoke, products of combustion, objectionable odors, etc., might be considered as producing foul air, but it is far better to specify the contaminating substance in question than to use a general and meaningless term. The word should be discarded as it is meaningless and misleading.

The science of ventilation is no longer an infant. Its swaddling clothes should be laid away and a new dress, a new nomenclature adopted, one that carries with it no preconceived ideas to retard its progress and prevent its recognition as one of the most important sciences of the twentieth century.

Let us proceed now to discuss air conditons that exist in the average classroom at the present time and analyze, if possible, the various factors which determine the same. With a clearer understanding of these factors we will then be in a position to propose certain corrective steps where indicated.

Let us define "aerology" as the science of producing and maintaining air conditions in a room or given space that are best suited to the physiologic or economic requirements of mankind. The science naturally falls into two divisions as indicated in the definition, physiologic aerology referring to the science in its application to the requirements of human beings, and economic aerology the application of air conditioning to the various industries and manufacturing processes.

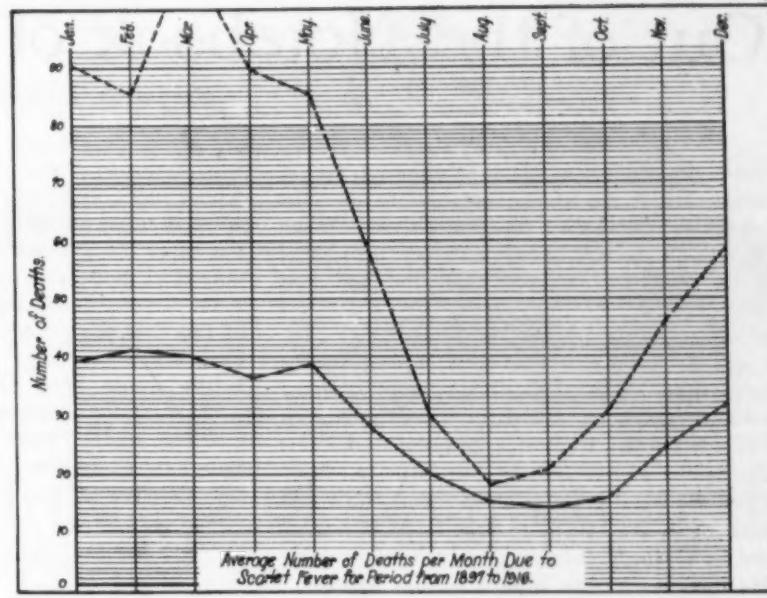


Figure 2.

Aerology of the Classroom.

None of my readers will deny that the United States of America is the greatest country in the world.

The school children of today are the citizens of tomorrow and must spend the greater portion of their time in the schoolroom. We should, therefore, make every effort possible to protect their health and comfort while thus incarcerated, for we must remember that the confinement of our children indoors is subjecting them to an unnatural condition which unless every safeguard is taken will surely undermine their health and retard or prevent their proper development. How unfair is it then and how shortsighted a policy, from the standpoint of the greatest good to our country and to posterity, to allow schools to be conducted in buildings that are insanitary, improperly lighted, or in which the air conditions are not up to the desirable standard.

A great many people are laboring under the impression that the schools of today are models of sanitation and that all necessary safeguards have been provided for the health and well being of the pupils. A superficial examination of mortality and morbidity statistics, however, or an investigation of the reports of school health officers will readily convince one that this is not the case.

To illustrate, examine chart No. 1 showing the number of reported cases of diphtheria and croup and the number of deaths from these diseases in Chicago for the past twenty years. The dotted line indicates the number of reported cases divided by 10. This was done to bring the two curves in close proximity for comparison. Note how the reported cases and deaths dropped off gradually during the spring months, then sharply about the time of the beginning of the summer vacation, reaching their lowest point in August. Note how rapidly the curve rises when school convenes in September, reaching its maximum in November.

The curves for scarlet fever, illustration No. 2, have the same general characteristics except that in this disease the number of deaths is highest in the spring months, whereas with diphtheria and croup the maximum is reached in November. The low point, however, falls in the vacation period.

The curve for pneumonia, illustration No. 3, between the ages of 5 and 20 years, shows the same low point in August and the same increase in the heating season.

Out of the Notebook of a Country Schoolmaster

Frederick J. Ward, Brockway, Mont.

Teacher and Gossip.

About the middle of last October, a young woman named Cora Stacey went out to open the school at the mouth of Tussler Creek. When she got to the end of the stage route, she hired a saddle pony and started on. She had just reached the edge of the Tussler Creek district when she was overtaken by a blizzard.

It was not a cold blizzard but the wind grew so fierce that it was impossible to see. Another girl would have been in a panic but Miss Stacey was raised in the Redwater country and knew all the tricks of our treacherous climate.

When the wind grew so strong that she could no longer get her mount to face it, Miss Stacey turned in at the first lane. As luck would have it this lane led to the Widow Kern's shack.

The Widow Kern had lived on her claim a number of years but none of the folks had anything to do with her. There was never any scandal, but she had peculiar ways. She seemed disinclined to visit her neighbors. She spoke snappishly to anyone who came to her house. Whenever she hired men to do her plowing or to harvest her wheat, she made them stay at Herb Emmette's place a half mile away. When Miss Stacey knocked, the widow came out and helped put the pony in the sod barn. She took Miss Stacey into the shack, wiped the sticky snow off the teacher's face, made her change clothes and dry her hair before the fire; scolded her roundly for venturing out in such weather.

After three days the storm let up and Miss Stacey went on her way. The weather turned warm as summer again. The Tussler Creek school was opened.

As is always the case, before a week had passed, the teacher had heard all the public and semi-public history of the people in the neighborhood. When they told her what they thought of the Widow Kern, Miss Stacey protested.

"She is snappish, I know," the teacher admitted, "and peculiar. But I stayed with her three days and I found that beneath her apparent rudeness, she had a heart of gold."

This was quoted. The women were curious to know if the teacher might be right. Along toward the middle of November the sewing circle went in a body to hold a session at Mrs. Kern's place.

The widow spoke snappishly to them. When they came inside she scolded because some were not dressed warmer. She made them all sit close to the fire while she brewed some tea; waited on them with fussy solicitude.

The widow still lives in the same shack. She never visits her neighbors. She still speaks snappishly to everyone who comes to her door. Whenever she hires a man to work for her she makes him stay at Herb Emmette's place. But women occasionally drop in to see her and whenever people speak of the widow they say: "She is a peculiar old woman, but she has a heart of gold."

All this came about because a teacher happened to get acquainted with an old woman before gossip had had its say.

Official Courtesy.

When I was out in District 101 last week, I went to visit Miss Korrie at the Lazy A school. I wanted to see her for I happened to know that she had recently applied for the primary room at B—and I was curious to know what action had been taken.

"Those people are surely fine folks to deal with," she told me. "I had a reply from the school clerk five days after I had written him. That is quite unusual. Do you know, last year I applied for five positions all at the same time. One clerk sent back my application immediately with 'Rejected' written in pencil on the margin of the first page. Another sent my application back six weeks after I applied. No comment. Eight weeks after I applied, a third clerk wired that I was elected, and demanded an immediate reply. But down at B—they do things in a business-like way. This is how they acknowledge an application."

She showed me a form letter, partly printed, partly filled in with pen and ink. It read like this:

Dear Madam: I thank you for your application which was received Apr. 2 and placed on file. It will be presented to the trustees at their next regular meeting Apr. 20. You may expect a letter from me about May 1, informing you of their decision. *The trustees like a clear photo of all candidates. Better send me one if you can.*

Very truly yours, H. M. B.

H. M. Bancroft, Clerk, Dist. 1,
Yellowrock County.

"Did you get the decision when the clerk promised?"

"Oh yes. His letter came promptly."

"Were you elected?"

"No," Miss Korrie answered a bit ruefully. "I am sorry, too, for I am sure those people would be prompt and courteous folks to work with."

When I handed back her letter, Miss Korrie folded it carefully and locked it up in her desk. She seemed pleased with it, but for my part, I always feel cheated when I get a form letter or one signed with a rubber stamp.

The Anchor.

Antelope is a little town in the northwest corner of Bourbon county. It is a pretty little place when once you have crossed the breast-work of empty tin cans that surrounds it. Patriotic citizens point to the fine dwellings, the graveled streets, the flour mill, the new creamery, as evidence of the boosting spirit that will insure the future of the town.

So far as population goes, Antelope does not cut much figure. I imagine there are upwards of a hundred million people in the United States who have never been there, maybe even more than that would not care to live there. Yet I know one man who is bound to Antelope as firmly as a house to its foundation.

It happened this way. Last spring the people voted to bond the school district for five thousand dollars to put up a new high school building. Then without any authority whatsoever, the trustees built a house that cost nearly three times that amount. I don't think they really meant to spend so much, but lumber was high and freighting ran into a large figure. Everything had to be done day labor for no reliable contractor would come so far from the railroad to do the job. Mechanics were scarce and the men hired made costly mistakes.

About two months ago the trustees called a second election to finish paying for the schoolhouse. In the meantime some people became curious as to how and why so much money had been spent. An investigation was begun. Those who examined the school records asserted that altho they were unable to lay their hands on actual graft, there were many transactions which were decidedly irregular.

There have always been two factions in Antelope and here was an excellent excuse for a fight. The opposition adopted the slogan, "The trustees spent money without authority let them pay it back themselves." Those who favored the bond issue accused their opponents of being anti-school men, bent upon tearing down the excellent system which the trustees had built up with such care and labor.

The election was very close. The bonds were defeated by one vote.

A month later a third election was called with the same result.

Now it was hinted about that the opposition had rung in votes that were illegal. The case of Art Butt was cited to show that those against the bond issue were nothing but a band of cut-throats who aimed to destroy the Antelope school.

It seems that just before the third election Art moved out of town to his homestead in another district. In spite of this he drove back with his wife on election day so they could vote against the bonds. The judges challenged them, but they stubbornly swore the votes in.

For the life of me I can't see why Art mixed into this fight. He is the last person in the world you would take for a fighter. He is a small, vacant-looking man, with a large globular head that seems to float on its slender neck. There is nothing about him that suggests pugnacity or vindictiveness. I was dumbfounded to hear that Art had taken such a decisive part in defeating the bond issue. Certainly the high school never did him any harm. He doesn't pay a nickel of taxes in the Antelope district. He had nothing to gain or lose whichever way the thing turned out.

Maybe he had been taken in by skillful agitators, as some of us often are.

The trustees filed a complaint with the county attorney against Art for swearing in illegal votes.

Everybody who had voted against the bonds was in sympathy with Art. They chipped in and hired a lawyer to defend him.

"Of course, you understand that when you took oath that you were a voter in the Antelope district, you assumed all the responsibility," the lawyer told Art gravely. "You swore that you were 21 years old; you swore that you were a citizen of the United States; you swore that you had resided in the state of Montana for one year and in the school district thirty days next preceding the election. If the other side can prove that any one of these statements is untrue, it makes you guilty of perjury."

"You left the district seven days before the election. On the surface that would make it look as tho you had relinquished your residence in Antelope and thus lost your right to vote."

"However,"—and here the lawyer looked sharply at Art,—"a change of residence can only be made by an act of removal joined with the intent to remain in another place. If your homestead is to be your permanent home, the case is quite different from what it would be if you left Antelope expecting to go back there soon."

Art took the hint. Two days later he moved back to town.

He has now stayed so long that he missed the spring planting on his homestead. Tom Start offered him a carpenter job out on the Big Dry, but Art did not dare take it. He is afraid to venture out of town for fear that his enemies will arrest him for perjury.

(Concluded on Page 88)



Advantages and Disadvantages of Mental Tests

Ira B. Fee, Superintendent of Schools, Missoula, Mont.

For the past two years the elementary schools of Missoula, Montana, have made extensive use of mental tests. At first the testing was done with group tests which were themselves on trial, but the tests now employed are of such refinement that their efficiency in the schools is generally accepted. School time is of such great value that its interruption is justified only when some substantial result is to be secured thereby. The earlier tests, with their elaborate formulae, broke into the program of the schools so extensively that the interruptions made the value of the results open to question on a sheer basis of economics. Now the time required to give the group tests is so small that there is but little interruption of the school program. The tests given during March in all the grades above the third were conducted in about three hours. About one hour of school time was later given up to recording the results of the tests. Thus one of the earlier disadvantages, the large time element required for the mental testing in the schools, has been greatly modified.

The importance of determining the natural mental aptitudes of children is now realized. Too often children have been classified wholly on the basis of the judgment of the teacher, and not unfrequently the judgment formed of a pupil by one teacher is passed on to the next room with the child, the teacher evidently feeling that all the opinions and prejudices she has formed must in some way be associated with these children in the next grade. The school fatalities that result from this insidious custom are well known. Not uncommonly children suffer great misunderstanding and permanent injury in this way. Teachers are, like most people, likely to form judgments concerning pupils on superficial evidences of intelligence. Not uncommonly children possessed of glibness of speech, willingness to conform patiently and with apparent pleasure to the requirements and plans of the teacher, and with a facile readiness to please, will be adjudged by the teacher in all honesty to be the best pupils. These or other factors may creep in to warp the judgment of the teacher in her dealings with pupils, with the result that such children are often wrongly classified, are really working in situations offering to the child unfathomable difficulties, and which he has learned in a cunning manner to conceal from his instructor. Mental tests do furnish, therefore, an impersonal and scientific method of selection which take into account only the qualities of intellectual ability.

Standard Grading and the Tests.

Mental tests have also helped to standardize the ordinary methods of grading in the subjects of the curriculum. Probably most teachers have participated in those tests of different grading

standards wherein, let us say, a seventh grade composition is graded by twenty or more persons, the final compilation of grades ranging all the way from 20 per cent to 95 per cent. This same instability of grading standards runs through all the subjects of the curriculum, the so-called exact subjects like arithmetic, physics and chemistry faring no better than the less definitely organized subjects of the curriculum. Now that we have mental gradings which have been accepted as approximating exactness, teachers are beginning to think in terms of the abilities which are associated with those standards, and there is less of the humiliating divergence in estimation of paper values. That this is important none will gainsay. That this stability is coming a comparison of mental abilities with the scholarship grades will show.

The tests given in the Missoula schools in all grades above the third have been analyzed for the fourth, fifth and sixth grades. The tests were arranged by grades, and first the results of the tests were classified in the order of mental abilities disclosed. The group forming the quartile of greatest mental ability were listed; in like manner the group forming the quartile of lower mental abilities. The middle fifty percentile were then grouped together. The names of the pupils with their intelligence quotient were listed, and on the same line were given their grades for the first semester, the rank of each pupil in intelligence coefficient, and finally the corresponding class rank in scholarship as determined by the average of class grades for the work of the first half-year. The entire results may be roughly tabulated as follows:

Grade Given or Mental Test	No. Tested in Grade	No. Pupils in Upper Quartile	No. Pupils in Lower Quartile	No. Pupils in Middle 50 Percentile
4	206	58	45	103
5	236	58	58	120
6	185	48	45	92
Totals.....	627	164	148	315

A comparison of mental abilities with ranks in scholarship was made with hopeful results. Each teacher in fourth, fifth and sixth grades reported on the same sheet in which the I. Q. of the pupils was later placed by the examiner in parallel columns, the scholarship grades in arithmetic, reading, spelling, geography and history, and the averages of these grades were taken and the pupils were then classified according to rank in scholarship. All this was done before the intelligence quotient, determined by an impartial examiner, was recorded. The results will be of interest.

Fourth Grade.

In upper group in mental ability and in scholarship	24
In upper group in mental ability and middle group in scholarship	26
In upper group in mental ability and lower group in scholarship	8
.....	58
In middle group in mental ability and scholarship	66
In middle group in mental ability and lower quartile in scholarship	14
In middle group in mental ability and upper quartile in scholarship	23
.....	103
In lower group in mental ability and in scholarship	18
In lower group in mental ability and middle group in scholarship	23
In lower group in mental ability and upper group in scholarship	4
.....	45

Fifth Grade.

In upper group in mental ability and scholarship	16
In upper group in mental ability and middle group in scholarship	33
In upper group in mental ability and lower group in scholarship	9
.....	58
In middle group in mental ability and scholarship	75
In middle group in mental ability and upper group in scholarship	27
In middle group in mental ability and lower group in scholarship	18
.....	120
In lower group in mental ability and scholarship	32
In lower group in mental ability and upper group in scholarship	8
In lower group in mental ability and middle group in scholarship	18
.....	58

Sixth Grade.

In upper group in mental ability and scholarship	19
In upper group in mental ability and middle group in scholarship	25
In upper group in mental ability and lower group in scholarship	4
.....	48
In middle group in mental ability and scholarship	53
In middle group in mental ability and upper group in scholarship	20
In middle group in mental ability and lower group in scholarship	19
.....	92
In lower group in mental ability and scholarship	21
In lower group in mental ability and middle group in scholarship	22
In lower group in mental ability and upper group in scholarship	2
.....	45

The greatest consistency in mental rating and scholarship grading is shown in the middle group. The percentage of correlation in fourth grade is 64 per cent; in fifth grade, 62 per cent; in sixth grade, 57 per cent. Why there should be the lower percentage of correlation between mental ability and scholarship rating in pupils of either superior or inferior ability is open to conjecture. Several probabilities suggest themselves. First, the child of superior ability who finds himself held to the routine necessary to instruct his less alert associates often loses interest, pays slight or spasmodic attention, and is insufferably bored by the ceaseless repetitions required. Such a child, tho very capable, often is reputed to be a poor student. He is not required to extend himself in competition with his fellows, and, lacking that incentive, he does just enough to satisfy requirements.

Segregating Pupils of Special Ability.

This, of course, forms an argument for segregating the pupils of superior ability and permitting them, under skilled instruction, to make larger units of progress with an enriched curriculum. The pupil of lower ability who is still able to keep pace with pupils of average or superior ability not infrequently is a child who is taking over the work of the grade, or who is one or two years older chronologically than those associated with him. In either case there should be no hasty conclusions that the teacher has erred in her judgment of the pupil. The results should be studied, and the principal and teacher should be given an opportunity to explain the reasons she thinks account for the divergence. The fact that the teacher applies herself to this problem, insures an analysis of the pupil, his peculiar needs, and the ways in which she can give him best help, that should result in his advantage.

It was interesting to study the individual mental ratings in comparison with the individual scholarship ratings. There is, of course, no reason to assume that the child's ratings in scholarship should approximate his mental rating. Too many other factors are involved which affect the legitimacy of such a conclusion. For example, one child in the fifth grade showed an intelligence quotient of 61. This, of course, places the child in the feeble minded class, and a low grade also. None the less the child in question ranks as high as ten out of twenty in scholarship in the room, altho his rank in I. Q. is twenty. When we discover that the boy is two years older than the most of the children in the room in chronological age and that he is taking the work of the grade the second time we cease to be surprised.

The same explanation does not hold in the case of a boy in fourth grade whose I. Q. was 78 and who was ranked first in 47 in scholarship! In this case the boy is of normal physiological age for his grade. Two possibilities are open to investigation, first of which is the accuracy of the test in this individual case. It is quite possible that some peculiar personal reason intervened to upset the child at the time the test was taken, and an individual mental test should be given to determine this point. The other possibility, even probability, is that the teacher has permitted herself to be influenced by some of those superficial indices of alertness of mind mentioned early in my paper. These irregularities are typical of other individual departures for direct correlation, all of which will be open to scrutiny and the results later reported to my office.

Another tabular comparison of results of our tests may be of interest. In one school the upper fourth of the sixth grade had mental rating of 117 to 130; the middle group ratings for the same group are 101 to 116; the lower quarter range from 86 to 100. The contrast between

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this school and several other schools is so great that it is presented in a table herewith.

Range of Intelligence Quotients in Three Grades of Five Schools, Missoula, Montana.

Grade 4.		
	Upper Group	Middle Group
School	1.....	111-131
School 1.....	111-131	95-110
School 2.....	110-123	85-109
School 3.....	99-105	82-98
School 4.....	101-122	87-100
School 5.....	100-110	81-97

Grade 5.		
	Upper Group	Middle Group
School	1.....	111-125
School 1.....	111-125	94-110
School 2.....	102-120	85-101
School 3.....	103-123	87-102
School 4.....	98-109	88-97
School 5.....	100-110	81-99

Grade 6.		
	Upper Group	Middle Group
School	1.....	117-130
School 1.....	117-130	101-116
School 2.....	105-120	85-104
School 3.....	104-115	83-103
School 4.....	104-124	85-103
School 5.....	104-129	82-103

It will be noted how much higher School 1 ranges in intelligence quotients than in corresponding grades of the other five schools. Assuming that the disparity indicated really exists, would we be justified in expecting the work of instruction to be easier in School 1 than in those buildings where the I. Q. records are much lower? Will these pupils in general require less concrete illustration and make progress with more of the instruction involving abstract relationships? Will they not read more extensively, more rapidly, more thoughtfully, than pupils where the records are ranging considerably lower? In short, will a rigid curriculum adapt itself to a school system showing these diverse abilities?

The mental test has some elements of weakness, due to the fact that standards are still in the making. We are probably far from the nearly perfect test that we may anticipate for the schoolman a decade hence. These elements of weakness need not disturb us. We will now avail ourselves of the obvious advantages offered by use of the tests, improving the test itself with practice. The Courtis tests in arithmetic were made up from use. As the use of the tests extended and results were reported and tabulated, the more nearly the tests approximated the standard which schools may fairly be held to accomplish. The North Central Association of Colleges and High Schools early set up standards for colleges and high schools, which became valuable only as those institutions tried, tested, and improved those standards. In like manner the use of these mental tests is tending to their refinement in material and in method of checking and recording the results.

Benefits of the Tests.

A few direct benefits that should result soon from the use of the tests should be mentioned. For some time schools have been caring for the backward child. Indeed it is the backward child that has set the pace for progress thru the schools. For some years it has been recognized that pupils of low mental ability require vastly more teaching for the same units of progress than do the children of more alert minds. Indeed from twice to ten times the same amount of attention should be given to the child of low grade mentality than is given the child of superior mentality. Such pupil requires the use of concrete illustration, with abundant repetition of statement and elaboration of explanation. The child of average ability sits patiently and listens to these many repetitions, whereas the child of superior attainment can by no stretch of imagination be made to retain the

quality of patience thru what to him is a senseless recounting of perfectly obvious detail.

For twenty years the schools have made halting attempts to take care of these children of widely divergent abilities. Various plausible plans of grouping and promotions have been evolved and used with more or less success. The judgment of the teacher has been relied upon to make selection of the children for the different groupings. To the student of this subject the fallibility of this process is obvious. The judgment of the teacher is reliable only within certain limits, and the teacher herself is very glad to have the use of an instrument that will guide her in making wise selections for contemplated groupings.

A most common difficulty is a tendency to place in the class of pupils of superior ability too many who are not endowed by nature with the abilities that will hold them there successfully. Where these bad groupings result, the slow pupil again sets the pace. The mental test must assume a larger place in grade and group classification of pupils. Children of special mental ability should be grouped together and permitted to progress thru the grades at a greater rate, with less concrete and more abstract work and with an enriched content of material. The use of the test for this service will give each grouping a better and fairer opportunity.

In Missoula our grouping is arranged on the basis of abilities and the mental test is valuable in accomplishing the divisions. The use of this test in many cases has helped us to avoid errors in classification. The test is of great practical importance also in determining what special aptitudes children have and thus thru what approach entrance may best be gained to the child mind.

The school administrator is finding the mental test an excellent means of determining whether or not a teacher really has a difficult problem requiring unusual patience and skill, as, for example, a teacher of a group where the mental ratings of the pupils are unusually low, or, perhaps with a group of high mental ratings, with results still ordinary, such teacher is failing at her task. The administrator who ignores the quality of material in which effects are to be produced is not fair to his teachers. The administrator and supervising officer also find the mental test valuable in guiding the selection of pupils for certain types of work. Some children have almost no aptitude for hand work, and the mental test may show this clearly. At the same time the mental test may show certain aptitudes possessed by pupils that need development. Is not the day fast approaching when these natural aptitudes will be developed even in the elementary schools, and individual differences employed to the advantage of the pupils?

Many other advantages of mental tests will doubtless occur to the reader, but patently the advantages outweigh sharply any disadvantages that may be alleged. The mental tests have come to the schools to stay, and soon, I predict, that school system that does not avail itself of their use will be counted non-progressive.

"The teachers must impart the ideals of Americanism, they have charge of the training of the children of the American people", says Hugh S. Magill, the field secretary of the National Education Association. And then the prosaic teacher says to another: "Let's go on strike for more pay!"

A school principal at Oklahoma City is charged with smoking a pipe down in the boiler room in company with the janitor. His defense is that he smoked behind a bolted door. Well, why not keep that door bolted indefinitely?

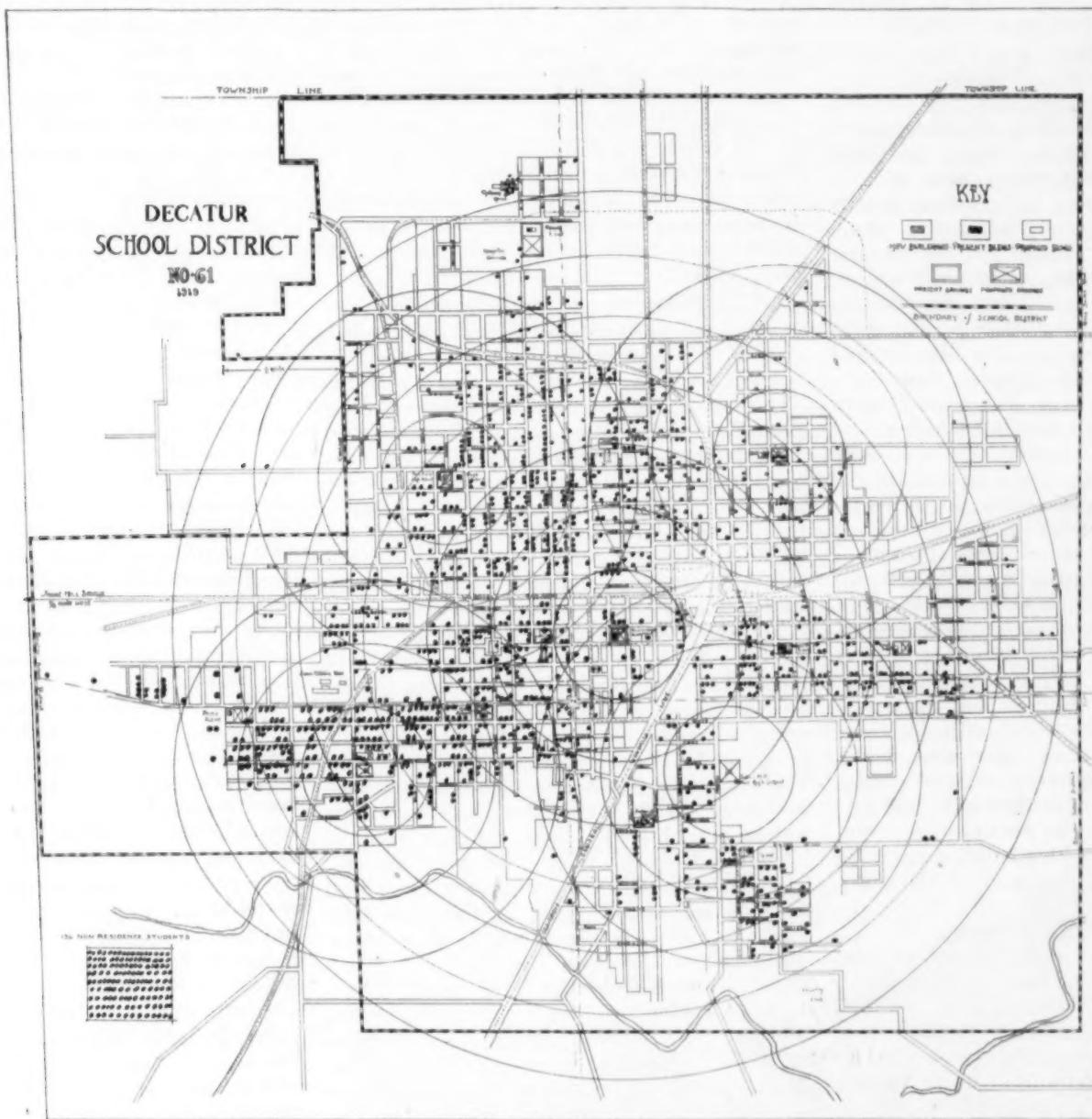
The Elements of a Workable Building Program

Arthur Kinkade, Secretary-Business Manager, Board of Education, Decatur, Illinois

In these days of most unusual economic phenomena, every individual, every firm, and every corporate body that expects to stay in business must give serious and constant attention to the trend of daily shifts and changes. Doubtless in all history there was never such stirring of the very foundations of civilization as we are experiencing at this time. Empires have fallen and new forms of government have been undertaken. The world is in a state of flux. The surge of unrest that sweeps the world today threatens to undo and even destroy the work of centuries in building up the stable

Thus it came about that the systems and methods we used to use were discarded and new systems and new methods were introduced to meet the changed and changing conditions of the day. The government of the United States became, and quite properly so, the dictator of national and individual action during the crisis that our country faced. The means of communication and transportation of the land and sea were taken over and operated by the government. Likewise the production and distribution of all materials and products were brought under central control to be used for the benefit of the

wise, never before has a higher state of organization been attained in business circles generally. Organization and price-fixing are in the air. Everybody seems to be doing it on one pretext or another. Generally speaking, it is these conditions that makes the trying times thru which our public schools must pass, and all are agreed that our public schools must pass thru the reconstruction period with as little loss as may be. Going back to the opening statement, then, since the public schools must remain in business, it behooves those of us who have a part in the management of schools to



Map Devised by the Author in Making a Building Program. Each Dot Represents a Pupil.

government of both hemispheres, including the government of our own United States of America. The organization of the leading nations of the earth on a war basis, and the participation of those nations in the great world war, necessitated revolutionary methods of thinking and acting. The normal course of events in individual and national life was disturbed and made to conform to the great work in hand—the world war. Men were reminded, many of them for the first time, that the state had first call on their time, their abilities, and their bodies, for use in the national effort in the great international conflict. Customs and habits of long years' standing were broken over night. The world left its tasks of peace-time and engaged in pursuits of war.

Address before National Association of School Business and Accounting Officers, Minneapolis, May 19, 1920.

greatest number. The great industries as well as the small ones were consolidated and banded together in the interest of concerted effort and united action. Business was coordinated and combined as never before. In short, the entire resources of our country were marshalled under a single directing power for the purpose of winning the war. This step was necessary to bring success, yet this welding together of such tremendous forces resulted indirectly in setting up the conditions that cause us most of our worries today. We are trying to unscramble the situation brought about by the war. Working men have been taught that unity of action brings success. Never before has labor been exalted as it is exalted today. Certainly never before in this country has labor been so scarce nor better paid in terms of dollars and cents. Like-

study the problems that face us, and take such steps as will meet the situation most satisfactorily.

Larger Salaries Imperative.

Accepting our responsibility in these matters involves the successful solution of at least two major school problems. The first, and doubtless the most important, problem of the schools at this time is the problem of raising sufficient revenues to pay adequate salaries to our teaching forces. The existing salaries of teachers and other school workers are shamefully low. A casual reading of the current newspapers and magazines of the hour is sufficient to understand that the situation is serious. Salaried people in general, and public service employes in particular, have been caught between the upper and nether mill-stones of the eco-

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nomic situation during and following the war. It is refreshing to note that both the universities and the schools are finding ways and means of granting partial relief to school people in the form of salary increases. These increases, while affording temporary relief, are still wholly inadequate to meet the situation satisfactorily. A united pressure still needs to be applied on the legislative bodies of the various states to the end that adequate school revenues be forthcoming immediately for still larger salary increases to the teachers. It is a well known fact that men and women in all walks of life give of their strength and ability more liberally when the income is sufficient to maintain a decent standard of living. School salaries have not yet reached that point. So long as the average salary of teachers remains below that of common laborers just so long must we continue the campaign of salary increases.

School Building Problem.

The second serious problem to be faced and solved is that of providing adequate school buildings and equipment to carry on the school work. Indeed, this has always been more or less of a serious problem. The extraordinarily high costs of building construction that obtain today have, however, complicated the problem many fold. With building operations practically at a standstill during the war, the shortage of school facilities has naturally become more acute than ever before. Not only has the need for more new buildings become more pronounced, but the high costs of construction are operating to reduce the amount of building that almost every city realizes should be done. Any discussion, therefore, that will help solve the present problem of building new school buildings in the light of current exorbitant building costs will be, it seems, a profitable discussion. Almost every school district has different conditions to meet. It is not possible, therefore, to evolve any scheme or plan that will be a panacea for all, yet there are many elements of any worth-while plan that may be applied to any given situation. We theorize less and come more nearly to a practical and workable basis when we draw on our own experiences for at least a part of any inspiration that may come to us to help others, and in presenting the following crude suggestions we are drawing on our own limited experience with a building program in a medium-sized city for most of the ideas advanced.

Building a Building Program.

Any question may be easily broken up into elements. A workable building program lends itself, therefore, to a universal rule on this point. If I were mathematically inclined, and wished to reduce the elements of a workable building program to a formula it would read:

$$I^P + P^P + S^P + (400\%) PEP + F^P = R.$$

in which

I=Inventory of Needs.

P=Preparation of Program.

S=Sale of Plans.

F=Financing the Undertaking.

R=Results.

The exponent "P" represents 100% pep.

Since lots of "pep" is required to overcome the resistance due to inertia in a problem of this kind we make provision for one hundred per cent of pep for each part of the undertaking. Working from this formula, we will discuss each of the four steps in consecutive order.

Inventory of the Needs.

Almost every school system has been many decades in the making. Those who have gone before us have left the handiwork of their ideas with us in the form of school buildings and grounds that have become out-of-date and in many cases obsolete. Remarkable strides have been taken in the past fifteen years in school

building design. It is a far cry from the old school building we used to know in our school days, to the ultra-modern creations we are building today. Electric lights, slate blackboards, steam heat, drinking fountains, adjustable desks, vacuum cleaners, ventilating fans, flush closets, telephones, gymnasiums, steel lockers, fireproof construction swimming pools, auditoriums, and electric clocks are only part of the long list of things that have been introduced into the schools in a general way within recent years. Because of this wonderful advance in the evolution of the school building, we find many relics of the old days in practically every school district.

Our first step, then, in working out a building program is to inventory what we have inherited from our forbearers and determine what part of it, if any, is usable today and worth salvaging. Some old structures may be profitably remodelled. Most of the old, antiquated schoolhouses should be marked for the slaughter and razed. On this point we must face the ire of the ease-hardened taxpayer, and the sentiment of a small percentage of traditionalists who deplore the destruction of old landmarks. In many cases the site can be salvaged provided that it is large enough and located right geographically.

Preparation of the Program.

When the needs of a school system have been checked over and analyzed, the very important work of preparing the building program begins. The first step in this work is to ascertain what the educational requirements of the system are likely to be over a period of years. Whether the eight-four, the six-six, or the six-three-three plan is to be followed has a very vital bearing on the building program. Sometimes the school buildings already in existence are a powerful factor in determining the plan of school organization that is possible to be followed.

To work intelligently in providing school facilities for a given city, a map should be prepared showing the density of school population in the several grades. This can be done by using a hollow-block map of the city with only the school buildings and principal streets shown. The number of children in each building must be known together with the grade and home address of each child. Using different colors of ink for each school, place a dot for each child in the block in which he lives. A separate map for high schools will show whether your high school is located in the center of school population or not. A Van Dyke print, blue on white, serves admirably for this purpose. When the maps are finished they will be pock marked, but they will tell you how well your school buildings are serving your community. The plan of school organization ascertained, and the geographical location of each school plant determined, the type of buildings desired is next considered.

The type of building to be erected will determine the size of the school site. If you make an error in the size of a school playground, make it too big. At the current price of school sites you will likely not err in this direction, however. In laying out a program covering a period of years dream big dreams. Consider the desirable thing rather than what may seem immediately possible. Make your plan big and comprehensive. For the time being forget absolutely what the cost in dollars and cents may be. Prepare what you believe to be the ideal arrangement of school facilities. Any comprehensive program will require years to realize, and of course be subject to revision and modification in the light of future needs. The public expects to be led by school people in school matters. By planning ahead of actual needs you not only have a program to work to, but

you have the advantage as well, of anticipating, ahead of public demand, the future of your school system.

The new buildings contemplated under a formal program of school expansion, as well as extensions, additions and repairs to existing structures, might take the chronological order of precedence on the building program. For instance, certain new buildings may be under construction or contemplated for early erection. These projects will naturally occupy the first paragraphs of the program. As the look into the future extends beyond the work now contemplated, and we pass from the known to the unknown quantities, real creative ability will have an opportunity to function.

A building program worthy the name must contain new ideas and original suggestions. While the program as a whole must be at least a likely possibility, the concrete recommendations, as separated from the whole, will need to undergo careful scrutiny as to practicability and desirability of realization. One possible fatal error in drafting a program for the schools of a city, that is prepared and offered for adoption by people who will carry it out, is the inclusion of chimerical and impossible recommendations. In this day of city-planning commissions and other live civic bodies who make it their business to scrutinize all plans and suggestions made for erection of public buildings, the time and effort put into an impractical proposal would be utterly wasted. This word of caution is introduced at this point to guard against an adverse reaction to an extravagant or carelessly thought-out program.

This treatise is intended to touch upon only the elements of a workable building program and does not, therefore, undertake the planning of a particular group of buildings, nor the specific treatment of playgrounds. The preparation of an actual program does, however, involve very definite and concrete planning for each school plant in the school system, hence the importance of careful and thoughtful study of the needs before making the final draft of the program. A liberal discussion of the questions that arise in making such a plan with architects and progressive citizens generally will bear fruit in the form of many suggestions that are helpful and worthy of incorporation in the program as finally drawn up.

Sale of Plans.

Before any program that might be prepared can be realized upon, it must be *sold*. It must be sold to the teachers and principals and superintendent. It must be sold to the board of education that is to make its realization possible. It must be sold to the newspapers who can make or break it. And finally, it must be sold to the public for whose benefit it has been prepared and who will furnish or deny the funds necessary to carry it out. Since it must be sold, then, it goes without saying that it must be attractive enough to find advocates and patrons of it. People who have a large part in the civic affairs of a city like to be consulted on public questions. Given an opportunity to know what is contemplated, the live wires in any community can be depended upon to rally to the support of any plan of civic improvement that is rational, progressive, and obviously needed.

The newspapers like good news stories, and if properly handled, the publication of the program by the newspapers will go a long ways toward selling the proposition to the public. The city administration, the association of commerce, the various noonday clubs, and other organizations working for the advancement of the city's interests can with profit be furnished with full information on what is contemplated. Wide and persistent spreading of the gospel of

better schools and better school buildings and grounds has a very definite psychological relation to the success of school undertakings. In other words, if the people living in a given community can be convinced that certain things are actually needed, and the way pointed out that leads to the accomplishment of the results desired, then the public can be depended upon to act in the affirmative. Selling building programs to the public is not easy work, but most things that come easy are temporary affairs and pass quickly from the public mind. A worthy building program for a city school system, taken seriously, is not a temporary thing, however, and deserves all the time it takes to sell it completely.

Financing the Undertaking.

Financing the building program is the last essential step necessary to its realization. If the preceding steps have been taken successfully, the financing of the scheme is relatively easy. The entire school structure rests in the final analysis on a financial foundation. Money is required to accomplish anything at all in school work. Money finds its way into the school treasury thru taxes levied on the property in a school district. The amount of revenue that may be raised by this method is fixed by the legislature of each state. A thoro study of the revenue laws of the state is therefore necessary in order to know the ultimate possibilities of financing a building program in any city. Generally speaking, new school buildings are erected by issuing the bonds of the district for this purpose. These statements are trite to school people, and yet some discussion of them seems to be worth while at this point.

Many and spirited have been the arguments as to which method is best in financing buildings used for school purposes. While every one knows that it is cheaper to pay as we go, the financial limitations placed about almost every school system by the state legislature is such that it is practically impossible to build new school buildings in sufficient numbers out of the current revenues. This is especially true in all growing cities, and growing cities are the kind we all like to live in and have a part in solving the problems of. The age-old argument in favor of issuing bonds is that the children now in the school will have to pay a part of the cost of the buildings they are now using. The tragedy of it is that they will pay the greater part of it and the part paid before they reach their majority will have been practically wasted. The following table reveals the effects on the child now in school of issuing \$100,000 worth of twenty year serial bonds, recognized as the most economical and practical form of municipal debentures.

It thus appears that interest charges on this issue amounts to 52½ per cent of the original loan. To this must be added the debt service expenses incidental to the floating of the bonds, including such items as legal services, election notices, printing of bonds, brokerage charges, cost of conducting the election, and sundry other expenses connected therewith. During the first five years \$25,000 will be paid on the principal sum together with \$22,500 in interest charges. This means that \$47,500 has been spent and the debt to be paid is still larger than the amount originally borrowed. The net effect on a boy in high school at the time of issue is that not only have his well wishers paid out \$47,500 or practically half of the amount borrowed, but he himself after assuming the duties of citizenship as a man will still owe more than was borrowed in the first place. The only way to escape this clearly inefficient way of paying for school buildings is to levy an annual tax sufficiently large to take care of all building needs without resorting to the issuing of

Table Showing Cost of Twenty Year Serial Bonds in the Amount of \$100,000.

	Principal Sum	Interest charges at 5 %
1st year.....	\$100,000	\$5000.00
2nd year.....	95,000	4750.00
3rd year.....	90,000	4500.00
4th year.....	85,000	4250.00
5th year.....	80,000	4000.00
6th year.....	75,000	3750.00
7th year.....	70,000	3500.00
8th year.....	65,000	3250.00
9th year.....	60,000	3000.00
10th year.....	55,000	2750.00
11th year.....	50,000	2500.00
12th year.....	45,000	2250.00
13th year.....	40,000	2000.00
14th year.....	35,000	1750.00
15th year.....	30,000	1500.00
16th year.....	25,000	1250.00
17th year.....	20,000	1000.00
18th year.....	15,000	750.00
19th year.....	10,000	500.00
20th year.....	5,000	250.00
Amount repaid.....	\$100,000	
Total interest charges.....		\$52,500.00

bonds at all. This procedure would establish a "pay as you go" or "cash and carry" program that would be manifestly fair, over a period of years, both to the present taxpayer and to the oncoming citizenship.

Public business is, as a rule, crudely and clumsily managed. The loss caused by the periodic turnover in administrative public bodies is almost beyond computation. Perhaps this condition of affairs is unavoidable in our system of government, yet the fact remains that we have not yet reached the point where it is possible to plan and lay out a program requiring a period of years to realize, with any degree of certainty that it will be carried out to a logical conclusion. Public opinion is for the most part, a fickle and changeable thing. Seldom indeed it is that city commissions and councils manifest anything more than a passive interest in the plans and designs of their predecessors. Whether this is due to a sincere lack of agreement with plans already made, due to the belief that a totally new and different scheme is called for, or just due to the general cussedness of human nature will probably never be known.

The same thing is largely true in the conduct of school affairs and school systems. The personnel of school boards changes with the whim and caprice of the electorate, and the administrative officers in turn are "changed" by the will of the employing board. These things are all in accordance with our conception of democratic forms of government, and still we know that in many cases it costs the public untold sums of money thru duplication of effort and differences of opinion of public officials whose responsibility it is to carry out the public will.

Conclusion.

In this somewhat rambling way, then, I have tried to point out some of the possibilities and some of the limitations that attend the problem of working out a school building program that will be worth the time and thought required to prepare it. There are other plans and methods, to be sure, that will result from a study of the subject matter presented. The development of our school plants must necessarily depend on the developments of the educational program. The two are separate and yet inseparable, and in the same sense that the problem of education is an ever-solving, never solved enigma, so the task of providing ideal school housing conditions must remain a flexible thing that will adapt itself to the needs of the child as those needs become apparent from year to year. The challenge comes to each one of us who carry any responsibility for the successful solution of our school problems to give unselfishly of such ability as we may individually possess to the end that in America there shall be erected an educational structure and environment that will stand the test of life as it is lived, and that our youth shall inherit opportunities that were never ours.

During the past year a five years' observation of the results of prophylactic dental work has been completed at the Bridgeport, Conn., dental clinic, with 20,000 children under observation in that time. During the year 42 schools were visited by dental hygienists, 28,920 prophylactic treatments were given in school sessions, 27,357 children were given tooth-brush drills, 1,412 were awarded bronze buttons for daily brushing, and 22 children won gold medals for having received bronze buttons for five successive years.



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TORNADO WRECKS SCHOOL BUT SPARES FLAG!

Tho the tornado which swept western Minnesota the night of June 8 completely demolished the schoolhouse near Everdell, it left the American flag standing intact where it had been left inside the building. This is what used to be the interior of the school.

The Great Educational Congress in the Mountains

The Fifty-Eighth Convention of the National Education Association, Salt Lake City, Utah, July 4-10, 1920

Notwithstanding the all-important relation which American education bears to American citizenship, a national education convention is very much unlike a national political convention. It employs no brass bands, no waving of banners, no extended periods of applause. It is wholly devoid of soul-stirring oratory, of breathless excitement, or wild demonstrations.

The schoolmaster who trains his fellowmen for that citizenship and statesmanship which make great national political conventions a possibility goes about his own conventions in an unostentatious manner. While oratory, music and endless applause held sway in San Francisco the educator was quietly arranging for a dignified and undemonstrative convention at Salt Lake City. He barely took time enough to glance at the big newspaper headlines dealing with political platforms, political candidates and presidential nomination ballots, and then turned again to the problem of schools, better schools, American schools.

Those who have observed both national political and national educational conventions are inclined to draw comparisons. Why not popular acclaim for the nation's foremost educators? Josephine Corliss Preston deserved all the enthusiasm that was showered upon MeAdoo, Claxton earned the demonstration that was given Carter Glass, Strayer the reception accorded a Cummings, Pearse the ovation given a Palmer, and Seerley the distinction conferred upon a Coolidge. Why not render to Winship, the educational Commoner, the same demonstration that greeted Bryan? Why not hail the California Chamberlain as we did the California Johnson, or think of the Missourian John R. Kirk in terms of a Missourian Champ Clark?

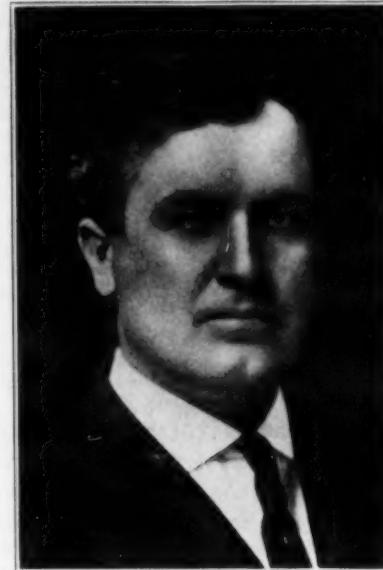
Educators versus Statesmen.

Are these educators less essential to the nation's stability and perpetuity than the statesmen whose names have been acclaimed in the two great political conventions? Are the educational Bradfords, Davidsons, Coffmans, Coopers, Searsons, and Crabtrees less deserving of popular applause than the political Lodges, Lowdens, Knoxs, Woods and Tumultys? Surely, Fred M. Hunter, the president-elect of the National Education Association, is as worthy of national recognition in his chosen field as are a Harding or a Cox in the field of statesmanship.

But, the American educator is undemonstrative, reserved and quietly purposeful. He stages his national gatherings on modest lines. While the public is the sole beneficiary of his generous gifts he knows that the recipients do not enthuse over him. Nor does he invite popular applause. He continues to work that the nation may live and enjoy the blessings of popular government—and incidentally of noisy political conventions.

And now to the convention—the educational, not the political. There was a great program. The subjects were timely. Many of them were ably treated. School administration was brought to the foreground in a congress of school boards, superintendents and teachers. There were also two splendid sessions of the Department of School Administration. Elsewhere in this Journal more is told about them.

Salt Lake City housed the convention handsomely. It provided good meeting halls, comfortable hotels, an efficient press service, and delightful weather. It advertised itself liberally, not so much for mercenary purposes as to dispel false impressions regarding the Mormon people.



FRED M. HUNTER,
Oakland, Calif.
President, N. E. A., 1920-1921.

It told of Utah's sugar beets, its cherry crops, its mines and water power. It described Utah's government and commerce, its remarkable educational progress, and described its loyalty to the nation.

The registration ranged in the neighborhood of 2,000, but the attendance at the general sessions reached the 5,000 mark. This is accounted for in the fact that many of those who had previously taken out memberships did not seek out the headquarters to register their names.

The Leading Issues.

President Josephine Corliss Preston wielded the gavel at the general sessions with precision and poise. Her "keynote" address touched upon the various problems which confront the educational situation of the land. The present emergency came in for full consideration. She was direct, forceful and at times eloquent.

The suggestion advanced by Dr. Strayer of the Emergency Committee, that teachers should organize along professional lines, but not to ally themselves with labor organizations, met with liberal applause. The argument that allegiance to class organizations disturbed the confidence of an entire people and interfered with that loyalty to the cause to which the teacher's work is dedicated, was approved by the great mass of those in attendance.

Miss Olive Jones of New York pleaded for "professional ideals and patriotic service" to be fostered by the teachers of America as a whole. She denounced organizations designed to create class within class, to oppose other factions of schoolroom workers, to antagonize superintendents, or to defy school boards.

Commissioner Claxton defended the American schools against the charge that they were a failure. Manufacturers and merchants continually hold that boys come ill prepared in general knowledge and the rudiments of an education. His answer was that the economic strength of the country, its supremacy in the field of production, and its enterprise and constructive ability provided ample proof that its system of popular education was rendering an efficient, if not a sufficient, service to the nation.

The Reorganization Issue Carried.

The business meeting was an exciting affair. To those on the outer rim of things the impression had been carried that the National Education Association was, thru some mysterious plan of reorganization, to be disintegrated and blown to the winds. A prominent educator had openly predicted that this would be the last meeting of the association. He was mistaken.

Those who were on the inner side of things told a different story. For five years they had striven for a plan of reorganization whereby the entire teaching profession of the land would be represented in the national body thru the delegate system. The association had become unwieldy in membership, those in attendance had a voice, and those absent remained unrepresented. The aim was to make the national body more representative and more democratic. The national charter had recently been so amended by Congress as to make the change legally possible.

The new plan of organization was presented by the board of directors and the steam roller method worked with a charm and met the approval of the audience. The leaders and floor managers were organized and trained for every emergency. The reorganization came up in the form of amendments to the by-laws. Section after section was read and a rapid fire of motions and adoptions followed.

Things rolled along merrily until the ninth section was reached. This section provided that state superintendents and state commissioners of schools should, by virtue of their office, be entitled to seats in the delegate body. Motions for amendments, excluding these officials from representation, came to the surface. After much pointless oratory the amendment was lost and the original motion carried.

Another wordy encounter was indulged in when some one offered an amendment providing for a referendum system. It was soon pointed out that under the new charter, as amended by Congress, the powers of the membership were conferred upon the delegate body, and that the injection of the referendum was therefore illegal. A motion to table the amendment started things, and Margaret Haley of Chicago made her appearance on the scene. She made strenuous efforts to secure a hearing for the amendment but the audience became impatient and the motion to table went thru with a bang.

The balance of the changes, which were technical in character, were adopted en bloc, and then came a breathing spell until the committee on resolutions made its report. This report proved a voluminous affair. It favored national support for the schools, the establishment of a national department of education with a secretary in the cabinet, better salaries, woman suffrage, prohibition, health crusades, permanent tenure for teachers, more liberal taxation, and international relations in education.

It was suggested that a plank dealing with salaries, tenure and pensions be considered. Those making the suggestions were unprepared with a properly framed document. Some one held that the best assurance of tenure was found in efficient service. Others held that a tenure plank should be conditioned on assurance of efficient service. Such a plank was adopted. A motion favoring equal representation for women on school boards was lost. One of the women declined a vice-presidency because she held that the proceedings of the morning had breathed the spirit of sovietism.

On the whole it was a businesslike meeting. The leaders realized that expeditious methods

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Publicity Campaigns for Better School Support

Carter Alexander, Assistant State Superintendent, and W. W. Theisen, Director of Educational Measurements,
Public School Department of Wisconsin

PART II.

The Campaign Staff.

To make a success of any undertaking skillful management is required. The importance attached to an efficient executive staff in military and political campaigns is apparent to everyone. In business a concern succeeds or fails chiefly thru the ability or lack of ability displayed by its executive staff. A school campaign must have a managing staff capable of operating at a high degree of efficiency. This staff must be fully informed as to the facts and adhere strictly to them. The public is to be informed and not misled. From the standpoint of organization the staff must first of all have a directing head or general manager in whom the whole organization is centralized. In addition there needs to be a supporting body or campaign committee. This body advises with the manager on proposed policies, helps him arrive upon courses of procedure and assists him in actually carrying out the policies fixed upon. The functions and duties of each, the method of selecting members of the campaign staff and their methods of work will be discussed in the remainder of this chapter.

I. The General Manager or Directing Head.

Selection. The position of general manager usually falls to the lot of the superintendent, whether he is self-appointed or chosen. It is true that there have been a few notable exceptions to this, particularly in some of the more recent salary campaigns in large cities, but in the great majority of cases he occupies this position. In fact it is doubtful whether any superintendent can long retain public confidence in his ability, if he does not prove to be the real educational leader at such times. He may not always appear in the foreground in person, but he supplies the vital directing energy.

The superintendent is usually the one who must carry out the preliminary steps. His proposals of what needs to be done are discussed with the members of his board. Sometimes this preliminary work may extend over a long period of time. Thus Superintendent Mary D. Bradford of Kenosha writes: "My plan has been to begin sometimes a year ahead to talk in committee meetings and on all possible occasions to school board members about the things that should be done."

If the attitude of the board is favorable, plans for an actual campaign can be laid at once. If not, the superintendent must employ other means. If he deems it advisable a survey of the educational needs of the community may be called for. In many cases arrangements are made for the selection of an executive committee which shall have active direction of the campaign. This committee, as we shall see later, has exceedingly important functions to perform.

Methods of Work. The general manager in school campaigns as in enterprises of any other kind is the centralizing force. He must see that the various component forces are properly harnessed together and made to work toward the solution of the one big task to be accomplished. He devises plans of action, gives careful attention to those suggested by others and sees that every helpful source is utilized. While much of the actual work may be nominally carried on by the executive or campaign committee, he must exercise a general supervision over the work of this committee. The general manager sees that the whole machine is func-

tioning properly and that it works the whole field.

There are two types of successful campaign managers. The one is out in the open leading his forces, while the other directs from behind the scenes. The former speaks for the issue before public gatherings of various kinds. He uses the newspapers freely. His personal efforts are evident even to the most casual observer. The latter, on the other hand, keeps closely in touch with his staff, advises them on what to do, allows his assistants to take the honors for things accomplished, but in the main keeps out of the spotlight. There are many examples of successful managers of each type.

In any given case the method of operation to be chosen must be a matter of judgment. The personality of the manager and the general attitude of the community toward public education are factors to consider. A strong vigorous leader, who exercises tact and good judgment, and who is a convincing speaker, is apt to succeed as an "open type" campaign manager. In many ways, however, the manager who remains largely behind the scenes, particularly if he happens to be the superintendent of schools has a distinct advantage. He is shielded to a certain extent from public criticism that might injure his general usefulness for the schools. If he manages his forces successfully he can appear to be allowing his fellow workers to do the real work and let them receive the credit that goes with it. The demand for increased financial support of the schools may appear also to come more nearly from the soul and body of the community, rather than from the manager who may be charged with striving for personal achievement.

II. The Campaign Committee.

Functions. The simple organization which comprises little more than the superintendent as general manager, does not suffice for large school campaigns. They need some sort of a committee organized for the specific purpose of carrying on the work or assisting those in immediate control and operating under the general direction of the managing head. This campaign committee fulfills three important functions. In the first place it serves as a buffer between the school authorities and the public. Being a body of representative public spirited citizens, it tends to secure public confidence, a prerequisite to all successful enterprises. In its buffer function it serves to protect the superintendent and the board from public criticism. Responsibility for the acts of the campaign rests upon the committee rather than upon the board or the superintendent.

The second function of the committee is an advisory one. It counsels with the superintendent and the school board, giving them the advantage of mature judgment and close observation of the trend of public sentiment. Reports of progress made from time to time and the policies of procedure are discussed with the general manager.

The third function that may be performed by the committee is more definitely executive. The members may act as assistants to the director or as experts in a certain phase of the campaign work, such as advertising or general publicity. To carry on its work more effectively the committee frequently has several sub-committees. The sub-committees may have oversight of specific types of work or may consist of spe-

cialists, each caring for a given line of work. They may call to their aid a staff of trained assistants.

How a campaign committee performs some of its functions, together with its form of organization and operation is illustrated to a degree in the case of St. Louis. In the bond issue campaign of 1916 the board of education appointed a "Committee of the Board on Bond Issues." The "committee believed that it was important that the citizens, independent of the Board or its officers, should undertake the work of securing a favorable vote. For that reason a mass meeting of citizens was called in the assembly room of the board of education. The meeting organized and provided for the appointment of a campaign committee to be called the Citizens' School Bond Committee, whose business it would be to spread correct information and arouse the people to a sense of their responsibility." * * * "The work of this committee was to raise funds, maintain a speakers' bureau, handling all speaking engagements for the campaign, and maintain a publicity bureau to provide the press with full information on the progress of the campaign." In addition there was a "General Committee on the Bond Issue," representing the principals and teachers. Cooperation was also secured from various patrons' organizations, the central committees of the political parties and other civic organizations.¹

An important task, either of the committee or of the manager, should be to select specialists in the various types of work. In any campaign the committee has abundant need of persons who are skilled in advertising or general publicity work, persons who are gifted in interviewing others successfully, and persons who are adept at platform speaking. The task of finding and choosing such specialists is a part of the work of the campaign committee.

It is the business of the members of the committee or of its staff of assistants to prepare material for dissemination. Some members may devote most of their efforts to this type of work while others spend a portion of their time in meeting, advising with and directing committees appointed by various organizations to assist in the campaign. In addition to these duties the members may engage in personal campaign work.

A good illustration of the use of sub-committees of specialists is afforded by Los Angeles. The several teachers' associations joined forces under the title of "The Los Angeles Teachers' Organizations." To take care of the various phases of the campaign this body appointed an executive committee on publicity to assist the publicity manager and pass upon the details of the campaign, and a number of special committees—data, exhibit, salary and auditing committees were included. The publicity manager was supplied with a staff of specialists, including a secretary and copy man, a news and copy man, a motion picture camera man, a man for art work, an exhibit man and a man in charge of charts and statistics. Besides these, personal interviewers were trained. A corps of five persons spent two weeks in thorough intensive training.²

How to Select the Campaign Committee. A digest of the literature of school campaigns indicates that the way to secure a strong campaign

¹Rep. Bd. of Educ., St. Louis, 1917, pp. 281-7.

²Data supplied by Hallock C. Bundy, Los Angeles, Salary Campaign Publicity Manager.

committee is to make it up of members, each of whom has ability or influence in at least one of several fields. Representatives of certain groups in the community, good executives, and persons with special abilities, as we have already indicated, are desirable. Thus a strong labor representative, a man with a good knowledge of real estate values and conditions, a representative of the wealthy interests of the community, a specialist in advertising, an editor and a representative of the religious organizations of the city, can each add material strength to the committee. In general two types of persons are needed for the committee—those skilled in "doing things," and those who can influence certain groups of people. The advertising specialist and the editor are examples of the former, and the representatives of labor and capital of the latter.

Types of Campaign Committees. Several types of managing or campaign committees have been used with success. Thus in the Tulsa, Oklahoma, building campaign of 1919, the committee was in the form of an organization of organizations. In the successful salary campaign in Los Angeles the executive committee on publicity of the affiliated teachers' organizations had general control. A paid publicity manager with a staff of expert assistants was employed. This type of organization is exceptional of course and can be fully carried out only in the larger cities. For the Minneapolis salary campaign all of the teachers' organizations were merged into one strong body. The teachers of St. Paul also organized the campaign in their city. In the words of Superintendent Hartwell, they "organized an effective

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campaign to interest the public and the Hennepin County delegation. They succeeded so well that the delegation increased the additional amount asked for from two mills to two and one-half mills." St. Louis, as we have noted, had a citizens' committee in active charge of the campaign to secure a general increase in school funds.

A number of cities have had a campaign committee from the chamber of commerce to assist the board and to bear the brunt of the campaign. Examples of this sort are furnished by Oklahoma City, Berkeley, California, and Menasha, Wisconsin. Oklahoma City and Berkeley had in addition a "citizens' advisory committee." The avowed purpose in each case was to assist the board in the expenditure of the funds derived from the bonds. The active part performed by such a committee may be negligible, but its real effect in developing a feeling of confidence in the sincere intentions of the board, may be tremendous.

Oakland, California, maintains a school publicity committee as a part of its regular organization. To quote from the report of this committee for 1917-18, "It is a well established principle of business practice that in order to successfully develop any enterprise a campaign of advertising and publicity must be carried on."⁴

This committee is made up of representatives of various departments of the schools, including the board of education. It is divided into six sub-committees as follows: Special page publicity, editorial staff for the publicity sheet, our public schools, high school publicity, files and

⁴Report of the Superintendent of Schools, 1917-18, p. 21.

records, board of education and finance and special features and advertising. In the building campaign of 1918-19 the board had the services also of an advisory bond committee composed of twelve leading citizens, to pass upon the question of the need of bonds. The final drive was managed by a committee composed of the superintendent, the publicity manager (a man employed for the purpose) and three other people chosen for the campaign work.⁵

In Johnston, Pennsylvania, much of the work was carried on thru an intraschool organization and a citizens' committee.⁶

III. Organization of the Staff for Work.

In principle, the staff organization must be kept as simple as possible if it is to work smoothly and effectively. Too cumbersome an organization might easily defeat many of its own efforts. In a small system an organization similar to that indicated by the heavy black lines in Chart 1 will be sufficient. The dotted lines represent additions and refinements for larger systems.

The most crucial point in the organization of the entire campaign staff will be found in the interrelation of the superintendent or general manager and the campaign committee. They must work in complete harmony and each must respond quickly to needs sensed by the other.

⁴Fratis, Sue L., *Bond Campaign for School Buildings, Oakland, California, Educational Administration and Supervision, Jan., 1920, p. 26.*

⁵"An intraschool organization was formed whereby eight supervisors took charge of eight districts of two or more schools. These district chairmen were responsible for the direction and development of the campaign in their districts. They met every Monday with the Superintendent, made specific reports and discussed and outlined future moves in the campaign." *School Life, November 15, 1919.*

The Next Step in the Standard Tests for Schoolhouse Design and Construction

Frank Irving Cooper, Architect, Chairman of the National Education Association Committee on Standardization of Schoolhouse Planning

Possibly one of the most remarkable omissions in the literature on school building is the absence of any work upon the economical utilization of floor space, in a modern departmental school building. The subject is of great importance, in these times of high prices of materials and labor of all kinds. It is of importance, not only to the taxpayer, who must foot the bills, but to the artificers, who must gain their daily bread, by work upon new structures. The artificers suffer when the high cost of school building prevents the carrying out of new undertakings.

The investigation undertaken by the committee on standardization of schoolhouse planning and construction of the National Education Association, purposed to determine—if such an ambition may be permitted—without speculations as to what might be ideal planning, what part of the modern school building could reasonably be declared as being used for the purpose of instruction, the object for which the building was erected.

For a historian, the story of the committee's tabulations, its comparison of data, and its experiments to discover the use of floor space in school buildings, will prove interesting reading. It reveals a condition of lack of interest and study, on the part of those responsible for the school plan, that passes belief. Spaces in the school plans were marked as being used for purposes for which they were totally unsuitable. Spaces were marked for activities which, if carried on in the areas assigned to them, defied all sense of proportion in curriculum and class unit.

What our tabulators thought about these things is their own affair. The architects are

safe because the tabulations were known only by numbers, and complexity of findings meant little to the draftsman and measurer of plans.

It is another story, however, when plans of new school buildings are seen, appearing in current magazines, plans based on old formulas apparently still serving architects as if they were beginners, instead of designers living in an age when all is motion. A schoolhouse plan should be luminous from its purposeful energy to serve the spirit of modern education.

Previous to the year 1920 there was progress, but the progress was, year by year, hardly measurable. The awakening and development of school life, since the tragedy of America's unpreparedness in 1916, has served to hasten the slow moving steps of progress, in the science of school planning.

The building of schoolhouses ceased during the war and now comes the reaction. Progress comes into her own. Natural law affirms that progress, which well nigh ceased, shall take on new energy and the educational and architectural world look to the committee of the National Education Association for an accounting of its time, during the period of seeming inactivity.

The president of this society has very kindly intimated that this accounting shall be termed "The Next Step," and this indicates that steps have been already taken by which the committee has arrived at its present position; and because there have been previous steps, it may not be amiss to acquaint the present audience with the standards adopted by the committee and already generally accepted.

The most important of these standards is called the Candle of Efficiency. This was de-

termined upon after some two hundred school buildings had been tabulated, to discover how the floor area of each had been used. Step by step the statistical facts were obtained and averages taken; then these averages were assembled, tabulated, and studied.

This Candle of Efficiency, with its six main divisions is now being used in checking school plans, in some of our most important architects' offices and the rules for measuring the floor spaces are here given, that an understanding may be had of the practical every day use of this measure.

Rules for Measurement and Tabulation of School Buildings as Formulated by the Committee on Standardization of Schoolhouse Planning and Construction of the National Education Association.

Rule 1. Computing Areas.

- Line of measurement for area of all floors is to be taken at the outside face of exterior walls. Deduct all recesses which are the full story height.
- The area of basement floor is to be measured from same line as outside wall of first floor.
- Compute each floor and mezzanine separately.
- The area of light wells, courts, air shafts, etc., are not to be included in floor areas.
- In rooms and auditoriums which extend thru more than one story the area of such space shall be deducted from the floor or floors thru which it extends.
- In the case of an assembly hall or gymnasium which has a balcony, the area of such balcony shall be taken separately.
- In figuring wall or partition areas, no door or window openings shall be deducted but

the wall shall be figured solid as tho no openings occurred.

h. Exterior walls and interior partitions are to be figured the finished thickness including any lath and plastering.

i. Flues are to be figured to include all surrounding walls and partitions except interior walls and partitions figured under h.

j. Where closets or bookcases or dead spaces occur in a bank of flues, same are to be figured in as flue area.

k. Stairs extending a full story in height are to be taken as stair area. Steps not a full story in height are to be taken as part of the floor area of the room or corridor in which they occur.

l. Large piers occurring in rooms are to be deducted from floor areas and added to wall areas.

m. Chimneys are to be figured in as flue areas.

n. Area of each individual space is to be taken separately in accordance with schedule.

o. Areas of arcades, open porches, uncovered corridors, pergolas and open air theaters or auditoriums, are to be figured separately.

Rule 2. Computing Cubical Contents.

a. Ascertain the cubical contents of the building by multiplying the area of the first floor computed by Rule 1, by the height of the building from the underside of basement floor to the mean of the roof.

b. In buildings whose basements are not entirely excavated, multiply the area of the first floor computed by Rule A (areas) by the height of the building from the underside of the first floor to the mean of the roof. To this content add the cubical content of any space between the underside of the first floor and the surface of the excavation, and in addition add the cubical contents of any partial basement which may be found in the building.

c. When portions of the building are built to different heights, each portion is to be taken as an individual unit.

d. Projecting entrance porches are not to be included.

e. Porches, covered verandas used for school activities and open air rooms and auditoriums are to be included.

The percentages of the Candle of Efficiency have given standards by which architects reach a better understanding as to whether their plans are well designed for economy of floor space.

The study of school building plans, taken the country over, revealed a startling variation between them. Even when the buildings were designed to house practically the same number of pupils, engaged upon similar lines of work, there was often no similarity between the details of the plans. It would appear that building programs are prepared and working plans made, without comprehension of the fundamental facts covering the conditions of the work to be later performed by the teachers and pupils, in the every day order of school exercises.

If the probable future program is laid out for a definite number of pupils and the type and number of rooms to fit this program is determined, a foundation of fact is laid, upon which to plan the layout of the proposed new school building.

The success of the school in the use of a new building is largely determined before a line is drawn in the architect's office, by the care with which this future program is studied.

Once the foundation of fact above referred to is laid, the architect can make every dollar expended upon the new building carry a peak load, by spending at least fifty cents of every dollar for those parts of the building to be devoted to purposes of instruction.

A study of the fundamental facts and a de-

termination of what is required, in the way of a building program to meet those facts, will enable the superintendent to face the financial world and demand, with every assurance of success, the appropriations required to properly carry on the educational program, needed for the proper development of his town.

Our next step therefore is the development of a method, by which the general size of the new school building may be determined.

If we can do this, by the application of steps that will work the greater number of times it is tried, the planning of school buildings will no longer be a matter of opinions and guesses. The new building will be founded on a basis of fact. No argument is needed to prove that such a method is desirable provided it is confined to translating the superintendent's data, on the maximum number of proposed pupil occupants, and the course of study into the number and the size of rooms and their floor area required to accommodate a definite number of pupils, when engaged upon their school work.

The method should solve this problem and should in no way hamper or interfere with the creative impulse of the skilled architect. Such a method or plan used with the per cents of the Candle of Efficiency will be the means of ending the confusion and waste now so apparent in the planning of school buildings. It will result in the same form of economy that now comes from the use of the budget system in financial undertakings. With such a method, guess work, uncertainty, worry and loss of time in laying out the requirements of the floor plan are eliminated and the designer, given his problem, may at once proceed on a sure footing, for

he will know from the start the exact requirements which he will be called upon to meet.

A six months' study of this problem and the trial and elimination of numerous methods in the practical work of the architect's office, gradually produced a certainty that facts obtained by the following rule were the basis upon which to plan.

Suggested Method of Computation for Size of School Buildings.

Compute the probable maximum number of pupils in each grade for which the building is to be planned. Each study and special activity for each grade, with their period allotment per week, is to be worked out by the superintendent. Determine the maximum number of pupils that would probably take each study and special activity. The maximum number of pupils taking a subject is multiplied by the number of periods per week allotted to that subject. This product is divided by the average number of pupils in a group or class in that subject. This is divided by the number of periods in which a room can be used in a week.

In the last computation any fraction is counted as a whole number.

The result is then charted for use of rooms. First is shown each room with its distinctive purpose, then any supplementary or duplicate use that might be made of the room, then the home room pupil accommodation, and then the teacher use of the room.

Charting the school, first by special activities and studies and then by rooms and their possible multiple use, shows what margin for flexibility will be required in determining the final number of class and study rooms.

A North Dakota Survey of Teaching

Dr. Wm. F. Clarke, Minot, N. D.

The Northwest Division of the North Dakota State Teachers' Association recently appointed a committee, of which the writer was chairman, to conduct a survey of the teacher situation in northwestern North Dakota. The aim was to get information which would be useful in a study of the salaries of teachers.

A similar survey had been made in Minnesota, and the committee thought it would be wise to use the same questionnaire as used in the Minnesota survey.

Twenty-five hundred of these questionnaires were sent out. With the questionnaire was enclosed a self-addressed, stamped envelope for returning the questionnaire to the committee when filled out. Only seven hundred were returned. This means that 65 per cent of the teachers were not greatly interested in the undertaking, despite the fact that its ultimate aim was better wages for teachers. Doubtless some failed to fill out the questionnaire because they lacked the requisite data. Others no doubt disliked to answer some of the questions because of their rather personal nature, and so answered none. The obvious moral to draw from this indifference of the teachers is that teachers need to develop more of a professional spirit. Teaching conditions will never be what they ought to be until teachers as a class take more interest in the profession as a profession.

A study of the seven hundred questionnaires which were returned brought out some interesting facts. Seventy per cent of the teachers in rural and semi-graded schools are graduates of high school. Only 30 per cent had any schooling beyond the high school. Six per cent are graduates of the eighth grade only. Less than 6 per cent have had as much as a year of professional training and 35 per cent are teaching their first term of school. This is probably not

a bad showing in comparison with other parts of the United States. But it is much worse than it should be. The rural and semi-graded schools are precisely the schools where most is required of the teacher. Education, training, experience, and maturity are qualities sorely needed by teachers in these schools. Yet, it is here that they are most seldom found.

One explanation for this situation is found in another fact brought out in the survey: Rural teachers receive the lowest wage paid for any regular service rendered society. Even cooks and chamber-maids are paid more! The price paid for the services of teachers may be looked upon as a safe index of the value placed upon education by the patrons of the schools. Without greater appreciation of the worth of education salaries will not grow better. Without better salaries rural schools can never be made to compare favorably with schools in cities. This is another way of saying that without better salaries children born and reared in the country must enter the race of life with the serious handicap of a defective education.

Another important fact confirmed by this survey is that the average teacher continues in the profession only about four years. As the majority begin teaching when they are not yet out of their 'teens, it is clear that the average teacher leaves the profession just about the time when her experience and growing maturity of life begin to make her services most valuable. It would be impossible to exaggerate the loss to our schools due to this short term of service. A similar loss is due to the fact, not brought out in the survey, but well-known to all, that teachers are migratory. Few remain in any one community longer than two years and many

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A Congress of School Boards and Educators

A Triangular Discussion in Which School Board Members, Superintendents and Teachers Participated

The most profitable session of the Salt Lake City N. E. A. meeting was the one on July 8th devoted to an expression of views presented by the three great factors in the maintenance of the schools of the nation. School board members were there and voiced their views with candor; superintendents were frank and open; teachers were fearless and outspoken. The relations which must govern the three became the keynote of the discussions. A monster audience assembled in the Tabernacle, applauded every salient point, approved every rational conclusion, and concurred in every thought in the direction of honest purpose, wise disposition and fair play.

Hon. James S. Freece, president of the school board of Davenport, Washington, presided in typical western style. He ignored elegance of diction, and employed terse and direct language. With the passing of the little red schoolhouse, the hickory switch and the spelling bee, he held that, a closer cooperation between school boards, superintendents and teachers was in order. And then he called upon the several speakers listed on the program. A few of the views expressed are presented here in nutshell form.

The School Board's Place in the Educational System.

G. A. Iverson, member of the school board, Salt Lake City:—The school board directs the physical phases of the school system. Its greater task must be to adjust itself properly to the professional phases.

Mrs. V. H. Miller, chairman of the school board section, I. E. T. A., Tacoma, Washington:—The weakness of the school system lies in the apathy of the public. A sound public sentiment is essential. A school board is not to save money but to spend it wisely. If that body is weak elect another in its place. The teacher should address herself to and impress herself upon the public to a greater degree than she has been doing.

Mrs. Carolina B. Kinney, board of education, Minneapolis, Minn.:—Mark Twain once said that "scattered thruout the country were groups of idiots called school boards." That was before women served on school boards. But, no one ever took Mark Twain seriously, and if anyone takes him seriously now it must be the disgruntled and unreasonable teacher. The principles that govern school control are the same that govern commercial or industrial enterprise. These must be recognized by both superintendent and teacher. The ideal school board recognizes that professional direction is the work of the expert. The public must be taught to elevate capable men to school board service if it wants good schools.

Mrs. Groce, member of the school board, Toronto, Canada:—It is the duty of the school board to secure a high educational output rather than to save dollars for the taxpayer. There is a common tendency to blame the school board when anything is wrong. Get the right school board and you will have the right school system.

Wm. George Bruce, editor, School Board Journal:—The unrest which has, since the great world war crept into all the relations of life, where authority and obedience come into play, has also entered the field of school administration. School boards resort to extremes and teachers take recourse to radicalism. Professional reputations are smashed with impunity on the one hand and defiance to school authority is recklessly manifested on the other. An indiscreet press completes the state of disorder.



DR. GEO. W. GERWIG,
Pittsburgh, Pa.
President-Elect, School Administration Department,
National Education Association.

School boards, in different sections of the country, have within recent months "fired" superintendents without regard to the professional reputation and usefulness at stake. There is a business side to every profession. Compensation, promotion and prestige are assets. Destroy these and you have driven the schoolmaster from his chosen field. School boards have with reckless abandon trifled with these assets.

Again, in various sections of the country teachers have tried to dictate the policy which belongs to the province of the school board. Strikes have been called by teachers because an unworthy member of their profession was dropped or because perchance the superintendent was not to their liking. Other unruly and unprofessional tactics have been resorted to. Salaries must be rendered adequate, the treatment accorded to teachers must observe courtesy and fairness, but there must also be an observance of authority and discipline if the work of the schools is to be kept upon standards of efficiency. And while the professional forces must recognize order and discipline, the school boards must recognize the scope, function and rights of the professional forces.

How to Keep High Class Superintendents.

Wm. M. Davidson, superintendent of schools, Pittsburgh, Pa.:—It requires a high class school board to select and sustain a high class superintendent. Only a proper conception of the true function of each—school board and superintendent—can lead to that efficiency which a school system should attain and maintain.

Mrs. Mary D. Bradford, superintendent of schools, Kenosha, Wis.:—The present emergency is due to an insufficient compensation of teachers. The "gassing of the local press and the shell shocks from the city hall" must not scare the superintendent. He must sell education to the public energetically and courageously. The office of superintendent must be brought upon a higher plane of public confidence and recognition.

W. F. Geiger, superintendent of schools, Tacoma, Washington:—The superintendent, who is expected to inspire teachers and pupils, requires appreciation and a cordial atmosphere. Proper compensation, security in office, business, civic and social standing, freedom from petty

exactions, are the things that the school board must accord to him.

W. N. Sheats, state superintendent, Florida:—School boards are not always wrong, and superintendents are not always right. In some places the superintendent has become a disturber and the teacher a Bolshevik. Both must be removed. There is not a school board in America that is not willing to pay all the salary it can afford to pay. Under our form of government there must be a final arbiter. School boards are here to stay. They fill an important function. Let us not forget that.

The Part Teachers Must Play.

M. G. Clark, superintendent of schools, Sioux City, Ia.:—First, let us hold up the gospel of mutual respect. The danger lies in an abnormal class consciousness. The problem is how to build an harmonious, cooperative, constructive school organization. The need here is for the recognition of the legitimate function of each member of the school body. It is the primary business of the teacher to touch the individual problem and to function as child leaders. But, the teacher must also become a social factor and dispel the notion that she is a "high-brow" with eyeglasses and a severe expression." Cooperative committees must create the faith of the teacher in supervision and administration. More cooperation between boards, superintendents and teachers will establish a greater faith in each other.

Cornelia Ada'r, president, National League of Teachers' Associations, Richmond, Va.:—The present unrest of teachers—aside from the question of salaries—is due to uncertainty of tenure and lack of social recognition. The problem centers itself upon a more common understanding. Teachers should counsel along professional lines and present their case directly to the school boards.

Jessie Skinner, teacher, Jefferson High School, Portland, Oregon:—The teacher should have a larger voice in school affairs. There is too much supervision and not enough self-expression. The streets of Boston are crooked because the people followed the cow path. Our educational efforts are inclined to run wrong if we cling too closely to the stereotyped. Conference, cooperation and loyalty are the first essentials. A lecturer once said that the way to find out what the audience thought of the lecture was to walk home with the audience. The way to get at the essence of school services is for superintendents and principals to mingle with their teachers and get their views. Too much energy is lost in useless written reports.

A horse trader in driving a bargain said: "I can drive a horse so far in one day that you couldn't get him back in three." Slave driving and fixed routine do not make for good teaching. School boards can get what they want if they go after it right.

Stella Herron, teacher, New Orleans, La.:—The dollar mark is not the cause of unrest. It is found in a dictated routine and an unrecognized creative power. Teachers should be consulted in the selection of a course of studies, in the adoption of textbooks, and in general school administrative policies. The teachers stand nearest the pupils and parents and can best reflect the educational needs of the day.

John R. Kirk, president, State Teachers' College, Kirksville, Mo.:—In team play everyone is assigned a definite part which he must play to the best of his ability. The teacher cannot pretend to play the part of the superintendent, the

(Concluded on Page 87)

The National School Board Convention

Department of School Administration, N. E. A.,
Salt Lake City, Utah, July 6-7, 1920

Those in attendance at the N. E. A. meeting and interested in school administrative problems gathered for two sessions at the McDonald Roof Garden. The programs were brief, timely and instructive. The first session was presided over by State Superintendent Linnaeus N. Hines of Indiana. Owing to the absence of Mr. Albert Wunderlich, the president of the Department of School Administration, his annual address was read by Mrs. Kenny. Wm. George Bruce acted as secretary of the first session.

"Constructive Measures in School Administration" was the subject of a paper read by Mr. J. E. Freece, President, School Board, Davenport, Washington. Mr. Freece discussed the importance of adequate compensation for teachers, a better distribution of popular education, the expediency of Americanization work, and the enforcement of teachers' contracts.

He pointed out the necessity of securing equalization in school taxation whereby all schools can be maintained upon an equal basis of efficiency. He cited instances where districts blessed with a wealth of taxable property maintained excellent schools while districts of meagre tax ability were not able to do justice to the schools.

Teachers Breaking Contracts.

He scored the class of teachers who immediately before the opening of the school term unceremoniously sent in their resignations simply because they had received a better offer elsewhere, ignoring wholly the fact that they had obligated themselves in a signed contract to remain for another year. In three states laws are provided to the effect that the breaking of a contract on the part of a teacher implies a cancellation of her state certificate. Mr. Freece held that all states should enact such laws. He also believed that where teachers violate their contracts legal action should be brought and an example set in business and professional ethics.

Discussion followed in which State Superintendent Hines of Indiana, Wm. George Bruce of Wisconsin, and D. C. Jensen of Utah participated. Mr. Jensen explained the new Utah law which compelled all aliens between the ages of sixteen and forty-five to attend school four hours a week and secure instruction in the English language. This instruction which is given in night schools, applies only to communities having a population of less than 5,000 inhabitants and where the number of aliens is sufficiently large to warrant the establishment of classes.

The chair appointed a Committee on Nominations consisting of Messrs. Frank Irving Cooper, James E. Freece and L. C. Neely. The committee named the following officers for the ensuing year who were elected unanimously:

President, Dr. George W. Gerwig, Pittsburgh, Pa.

Vice-President, Hon. H. A. Smith, Salt Lake City, Utah.

Secretary, Wm. C. Bruce, Milwaukee, Wis.

The following resolution submitted by Mr. Cooper of Boston was unanimously adopted:

"The Department of Administration of the National Education Association in convention at Salt Lake City, desires to express its high appreciation of the generous support given to its Committee on Standardization of Schoolhouse Planning and Construction by the General Education Board. We request the secretary to transmit a copy of this resolution to Dr. Abraham Flexner, Secretary of the General Education Board."

Standardization of Schoolhouses.

The second session was presided over by Wm. George Bruce. The President of the Salt Lake City Board of Education, Mr. H. A. Smith, opened the meeting with an address on the question of teachers' salaries. He dwelt upon the profiteering tendencies of the day and scored the sugar and coal producers of Utah. The difficulties with which school boards now grapple arise out of the fact that abnormal conditions must be met on a basis of taxation fixed at a normal time. A more liberal tax yield is the immediate remedy.

W. Randolph Burgess, Statistician, Russell Sage Foundation, delivered a most interesting address on "Eighty Years' Fluctuation in the Cost of American School Buildings." Thru the aid of diagrams he demonstrated the cost of materials between 1840 and 1920. He dealt with the cost of labor in the same manner, showing that the cost of school buildings had arisen about fivefold in the period named, and threefold since 1915. The cost per cubic foot of schoolhouse construction had arisen in three of the largest cities from 19 cents to 45 and 65 cents.

What Should Be Done To Keep High Class Superintendents In The Schools?

Mary D. Bradford, Supt. of Schools, Kenosha, Wis.

Since the conclusions reached by the commission on the emergency in education are that the present educational emergency is traceable in practically all of its aspects to the insufficient salaries paid thruout the country to those engaged in educational work, it seems clear that the first thing to be done is to campaign for better salaries all along the line.

The elimination of able men from educational work as a profession will, to a large measure, cease when they can see the same opportunities for reward in the educational field as in the industrial, commercial or other professional fields. Recently, in my own state several high class men have been attracted from normal schools and from supervising positions in the state department of education to city school superintendencies offering better salaries.

But the elimination will not entirely cease until other conditions are also changed.

Men of independent spirit are deterred from entering upon the work of superintendents, or leave after trial of it, because the conditions imposed by boards of education are unbearable, or because they refuse to attempt to hold positions thru influences that are non-professional.

Large boards or frequently changing boards, or boards where both conditions exist, must sometimes be dealt with, for example, a board of eighteen members, half of whom are new or begin new terms each succeeding April. Under such circumstances a continuity of school policy is about impossible. The only element making for continuity in such a situation is the superintendent, and the stronger the superintendent is for consistent and really progressive continuity, the less likely is there to be a continuity in the superintendency. High class men sometimes find superintendencies objectionable because school boards fail to understand where their prerogatives and those of the superintendent begin. Some of the most serious and most widely known school troubles in recent years are traceable to the cause just cited. Then the second thing that should be done is to work for improved administrative conditions, the small

It was Mr. Burgess' judgment that the cost of labor and material would not experience any material reduction during the next few years.

"Planning a Departmental School Building" was the subject of a report made by Frank Irving Cooper, Chairman of the Committee on Standardization, Department of School Administration, Boston, Mass. The report is so able and covers so many important phases in modern school architecture as to warrant publication in full in another issue of the JOURNAL. Mr. Cooper has concerned himself with newer developments in school activities and has aimed to recognize these in a more utilitarian expression of modern school architecture.

Mr. James A. Glass of Rochester, N. Y., described the organization and building requirements of a junior high school. He discussed the developments of recent years and the possibilities for amplification.

Mr. Burgess submitted the following resolution which was unanimously adopted:

"That the Committee on Schoolhouse Planning and Construction be requested to continue its study of the departmental school building and that it make the results of its work available to the educational world by the publication, from time to time, of bulletins or otherwise as may be found best suited to carry out the intent of this resolution."

school board, of liberal tenure, elected at large, and at an election apart from the regular municipal election.

There is a third important thing to be done. The first and second I have mentioned involve the education of the public, the third involves the education of the high class people we need in superintendencies.

Some young men disdainfully reject the idea of the school job because they want a life work that will utilize the potential militancy and leadership of which they feel themselves possessed. Such need to be shown that a superintendency offers the best sort of an opportunity for the fearless leader; that he can risk his professional life going "over the top" for a local educational cause, and bravely face "shell shock" and "gassing" for a school bond issue. School superintendencies are jobs for fighting spirits, and the cause of education needs just such.

Other young men reject the school job because they feel themselves especially fitted for salesmanship. These must be shown that the superintendency furnishes the best opportunity in the world for the exercise of such ability. It is the chief business of the superintendent to sell education to an indifferent general public. The possession of good salesmanship will be a distinct advantage in that a good salesman knows that a demonstration is worth more than a mere line of talk—and that after the demonstration he can well give considerable time to telling the public its significance. Surely there is opportunity in a superintendent's work for self-realization for the salesman. The cause of education needs salesmen of high ability, who believe in the commodity they are carrying. Then too it may help if these high class young men are brought to understand that there comes to the *shaper of lives* a satisfaction not realized by the *shaper of iron*, even tho the latter may receive the better compensation.

So my third suggestion is to exalt the work of the superintendent and cause it to challenge the interest of the high class young man.

The Part the Teacher Should Play in the Administration of the School System

Stella Herron, New Orleans, Louisiana

That the question of dollars and cents can be held largely, but not wholly to blame for the present shortage of teachers my experience as a normal-school teacher convinces me. For, from each graduating class a number of girls enter teaching with youth's fine enthusiasm and implicit faith in education as the golden means of making true the Declaration of Independence. Again, each believes that democracy insures to her, in her work, not opportunity alone, but reward and promotion for her individual development and the resulting social progress. When she finds that the system makes no provision for the use of her creative power, she leaves the ranks convinced that mere money could not induce her to follow the gray grind of a dictated routine.

Undoubtedly the nation is awake to the need for better salaries that there may be more and better teachers, but it has not yet realized that the present lack of teachers is due not alone to the small salaries. Surely the inadequate reward of teaching is no new thing. It was as well known by the youth of twenty years ago as by the youth of today. Yet, in the past, undeterred by the certainty of small gain, many chose this profession, in order that they might do the work they loved.

Now however, fewer are willing to make the sacrifice because the scope of teaching has changed. More and more are the plans and programs for teaching being prepared by the administrators. Consequently the grade teacher is forced to look upon her work, not as a fine art, but as a trade, and herself a medium thru which others work. Thus is brought about a situation which lessens the cheerfulness and initiative of a teacher more than the grueling conflict between a small income and the high cost of living.

This attitude of mind is easily recognized as a reflection of the thought of the day. For never before in our own history or in the history of the world, has there been a time when people have thought as seriously about democracy and what it means. Teachers cannot help but share in this growing conviction that true democracy means that all concerned in an enterprise must take some part in determining the policies and programs as well as in executing them. Whereas no one denies the truth of this principle as a general proposition, its acceptance in the field of educational administration is only gradually receiving acceptance and its actual application has not yet been thought and worked out to a wholly satisfactory conclusion even in the communities that have established a cooperative arrangement with this end in view.

It must be clearly understood that any suggestion from a teacher for a readjustment of the present organization of the school system can be justified only if such suggestion is based upon the principle that this reorganization would make possible better work on the teacher's part. It could never be offered for the purpose of securing ends desirable for the teacher's good only.

Now to the teacher whose chief concern is to make her work yield richer and more genuine returns and who sincerely believes that administrators and teachers alike, need the mutual knowledge, understanding, and sympathy which result from genuine cooperation in solving complex problems such as courses of study, selection of textbooks and of grade room equipment several obstacles to obtaining successful cooperation loom large.

The administrator who asks teachers to serve on a committee and then revises largely or ignores the report of the committee; who asks for suggestions and tables them; or who makes committee appointments for other reasons than professional qualifications does much to destroy interest in cooperative projects. On the other hand it is equally deplorable in effect if the teachers' councils or committees come under the control of the radical teaching members who sometimes neglect their duties in a struggle for their rights or fancied rights.

Because these unworthy conditions have sometimes prevailed it is now unfortunately true that a large number of the teachers most truly interested in their work avoid all participation in the efforts to secure representation. Therefore great care has to be taken in organizing any movement to further cooperation in a manner which will overcome this prejudice and appeal

to all types of teachers as well as to the supervisory officers and administrators.

The report offered in 1919 by Dr. Updegraff is so rich in suggestion as to how school administration can be, and is being made increasingly democratic that little need be added. Chief, however, among the many advantages resulting from the cooperative undertakings described therein is the enthusiasm for education awakened in the teachers participating.

For the proper maintenance of the schools it is necessary to secure and hold the interest and support of the community. The teacher is the representative of the school that comes in direct contact with the individual father and mother. She must be the bearer of the torch guiding all men to such a knowledge of and faith in the power of education to make certain "that government of the people, by the people, and for the people shall not perish from the earth" that they shall willingly and generously pay for it.

A SUPERINTENDENT'S VIEWS

The Part the Teacher Should Play in the School Administration

M. G. Clark, Superintendent of Schools, Sioux City, Iowa

A four minute discussion of so important a topic is a dangerous thing to undertake—by inference the many factors necessary to exclude in such a discussion may be construed as being of little importance to the mind of the speaker.

The speaker, however, would insist that his whole attitude of mind upon this subject cannot be measured either by the materials included or excluded. Such a discussion necessarily is incomplete and therefore not a dissertation. I present only the following four theses:

I. The Danger of an Abnormal Class Consciousness.

It would appear that perhaps the most important thing at this moment for the welfare of both teacher and administrator is the removal of the idea which has been promulgated so generally during the past few months that boards of education, administrators and supervisors are necessarily antagonistic or anti-sympathetic in their spirit and ideas to the spirit and needs of the teacher. An idea seems to have been fostered and to have become somewhat general that their interests lie in different directions. This is a false doctrine that must in some way be eradicated.

So long as class antagonisms exist the child will suffer thereby. So long as antagonisms are created, fostered, cultured, the schools will be stultified. The great present problem is *how to build an harmonious, cooperative, constructive school organization — an organization of co-workers sans an abnormal class-consciousness.*

II. A Need for the Recognition of the Legitimate Functions of Each Member of the School Body.

The speaker assumes that the organization of the American school system has been along lines of true school economy. There is no time for argumentation upon this statement. The statement implies, however, that each factor entering into the established school organization has a rightful place in the system and an economic function to perform.

This place and function then should be recognized and accepted as authoritative by the public

on the one hand and by each and every contributing school factor on the other.

The speaker presumes to define these functions as follows:

A. *Boards of Education.* It should be established and accepted that boards of education are *elected by the people for school legislative purposes.* School legislation and the general policies of the school organization function in and thru the board of education. They and they alone are responsible to the body politic of the school district for the efficient performance of those duties. Neither administrator nor teacher can function in that capacity.

B. *Administrators.* Administrators are appointed or elected by the board of education as *their administrative agents.* They must put into effect the legislations of the board of education whether it be general or specific. They are appointed to organize in harmony with that legislation the general school machinery and school policies. *They and they alone can be held responsible* by the board of education for the performance of that work. Consequently, they must possess the final word in matters of administrative policy. Neither the board of education nor the teacher can function in that capacity. Such attempted functioning always results in disorganization and inefficiency.

C. *Supervisors and Principals.* Supervisors and principals are, or should be, selected by the administration and elected by the board of education as *proven expert teachers of children and as competent administrators or interpreters of the course of study.* It is their business to apply these functions to the different localities of the school system in such a way as to meet the needs of each particular locality and yet maintain the unity of the system. It is their business to see that each school functions correctly for the child and that it meets the social and industrial needs of its environment. Supervisors and principals are selected and elected by the board of education for that purpose. They and they alone can be held responsible for that work.

D. *Teachers.* Teachers are selected thru the

cooperative efforts of the supervision and administration and are then elected by the board of education as the *tactile factor* of the school organization. It is their primary business to *touch the individual problem* and to know specifically the educational needs of the community they serve. It is, therefore, their business primarily:

1. To function as child leaders thru the school curriculum, thru the school organization and thru their social contact with the children and their parents.

2. To function in needed school organization and curriculum adjustments thru their frank discussions with their principals, supervisors and administrators of school needs or school weaknesses, to the end that the school may not become a great machine, but that the needs of the individual child may always be supreme; that rooms, schools or localities shall possess their individuality, *but always in harmony with general community good*.

3. To function in the community as something more than classroom teachers; to magnify the purposes of the teacher; to elucidate and magnify the work of the school and the influence of the school thruout the community.

(a) It is her business to mingle with the people of her community as an educational leader, adviser and worker. The patrons need education concerning the methods and work of the school. Cooperation of teacher with parents can only come thru a mutual understanding of the school needs and school work. The teacher is therefore a vital factor in the parent-teacher organization; a part of every movement in the community for its general educational uplift.

(b) Too many teachers are regarded by their communities as "high-brow." To the masses they are mental monstrosities with an eyeglass and a severe expression. To others they are nonentities. Teachers have isolated themselves more than their communities have isolated them. The teacher should be a social factor. She should be the church worker, or the club or lodge worker. Dances are all right, but the teacher needs to be more than a social dancer. She is a constructive member of the social life of the community.

(c) The teacher is still more. Upon her depends much of the harmony of the community life. Nothing disturbs a district or a community so much as a school misunderstanding. No one in the community has a look into so many skeleton-closets. No one is quoted oftener in the homes of the community, than the school teacher. The school teacher needs, therefore, to be a builder rather than a knocker; to be a tactful developer rather than an iconoclast; to be a seeker of harmonies rather than of discords.

4. To function in the general organization by keeping each organizing factor in touch with the teachers' economic needs and living conditions and to assist the administration in gathering facts and in maintaining a sympathetic economic relationship with her needs and with the individual teacher's problems.

III. The Necessity of Right Functioning.

Having established the functions of each member of the school organization, each of these factors, the board of education; the administrator; the supervisor; the teacher; must play his part and play it happily and with satisfaction to himself and the school. It is *his part* to play. No one else should play it. No one else can play it aright. His efficiency depends upon the observation of five playing rules:

1. He accepts the duties of his office without reservation and fulfills them—completely.

2. He cooperates with his fellows and with the other factors of the school organization—

for the general good of the whole school economy.

3. He seeks to maintain the harmony of the game; *he holds himself ready to go more than half way toward establishing and maintaining harmony and cooperation.*

4. He ceases to think "I" as a member of a class, but rather thinks "WE" as a complete school unity.

5. To him there is neither school autocracy nor subserviency;—no authority per se;—no dignity to maintain nor rights to establish. To his mind the whole test is the effective functioning of the complete organization.

IV. School Clubs or Organizations May Be of Great Value or They May Be of Great Detriment.

School clubs or organizations that magnify class as class are an abomination. School clubs or organizations that as a whole or thru committees study the school needs for the purpose of bringing all school factors to a common understanding are of inestimable value to all parties. *It is all in the attitude and purpose of the organization.*

Cooperative committees working harmoniously for a common good, respecting each other's work and each other's responsibilities, would magnify immeasurably the efficiency and standing of any school system. Such work would establish the faith of the teacher in supervision and administration and would establish the faith of the administration and supervision, in the teacher. Such work and attitude would establish the faith of boards of education in all their elected or appointed servants.

May such organizations come, grow and multiply.

SANITATION AND THE RURAL SCHOOL.

Orin Crooker.

Much of the propaganda of various kinds, in which the schools of our land are asked to co-operate, is based on the well recognized principle that the hope of tomorrow lies in the youth of today. When it comes to the matter of hygiene and sanitation, as this subject may come up either in the course of regular study or as a factor in public welfare, the rural school finds itself in a confusing position. There is no question but that here, as elsewhere, youth lends itself to life-lasting impressions. The fundamental laws of cleanliness of person, homes and surroundings can be so simply stated that even the youngest child of school age may grasp much of their import. A skillful teacher can set forth the perils that lurk in flies, impure water and privy filth in such a way as to make a firm impression upon the pastic

mind of youth. Yet it is often difficult for the rural teacher to carry conviction in things of this kind because of the clash of fact with theory. Insanitary privies are the rule, not the exception, in rural school yards, while the schoolhouse well is often readily accessible to pollution. The virtue of screens on door and window openings can be pointed out, but inquiring youth will wonder why these essentials have been overlooked in the schoolhouse.

Naturally, the condition of school premises in regard to sanitation depends almost wholly upon the enlightenment of the adult patrons and authorities of the schools themselves. Teachers can do little more than insist that pupils exercise ordinary tidiness. County superintendents can institute reforms in many cases and lead the members of local boards along approved paths of improvements. Here and there a school district may be fortunate enough to have among its directors a man of initiative who understands the influence of sanitation upon health. He may think of these things in terms of his own children, if they attend the school, or he may be broad-minded enough to think of them in terms of other people's children. If such good fortune be the case, sanitary toilets may be installed and the water supply secured against pollution.

The installation of sanitary toilets is a matter of no great expense or difficulty. Of the various designs which have been proposed the concrete pit privy, designed especially for rural school yards, is undoubtedly the best method of meeting the situation in question. Toilets with removable receptacles possess the disadvantage, under rural conditons, of having no regular scavenger service to visit them regularly. The concrete pit toilet is just what its name implies—a cement vault into which neither flies nor small animals can find their way. It is ventilated by a shaft that carries all odor directly to the open air. This structure is designed with the idea that it will need cleaning but once a year, and it is recommended that this be done just prior to the opening of school in the fall after the long vacation. By this time the contents of the vault will have lost, through drying and decomposition, much of their objectionable nature. During the school year a little dry, loamy earth is to be used in the vault once a day. Interested parties can obtain without cost complete drawings and specifications for such a structure by making application to the Division of Sanitation, Illinois Department of Public Health, Springfield, Ill.

In the case of the average school well the chief need is to make the curb tight so as to avoid surface wash and the consequent carrying

(Concluded on Page 87)



LONGFELLOW SCHOOL, BREMERTON, WASH.

Except for two additional classrooms at the rear this building is identical with the Schoolhouse at Charleston illustrated on Page 42.



NEW SCHOOLHOUSE, CHARLESTON, WASH.
Mr. A. H. Albertson, Architect, Seattle, Wash.

INTERESTING GRADE SCHOOLS.

The new schoolhouse at Charleston, Wash., is an interesting type of building and was developed as a result of war conditions which created a shipbuilding community not far from the city of Seattle. The building was erected for the United States Housing Corporation in connection with the Puget Sound Navy Yard Development. The plans for it were prepared in the office of Mr. A. H. Albertson, architect, and Mr. Gerald C. Field was in immediate charge of the designing and supervision.

The building has six classrooms which accommodate 240 pupils. The center portion of it is occupied by an auditorium seating 300 people and containing during school hours, forty movable chair desks for an upper grade class. A glance at the plans will show the special rooms assigned to the principal of the school, to the school library, to the teachers and to service use.

The auditorium has a flat floor and is equipped with a stage and curtain. The stage has dressing rooms on either side and is large enough for ordinary school entertainments and local community gatherings. At the rear of the auditorium there is a store room and above that there is a motion picture booth. The auditorium is amply lighted from windows in the clear-story.

The building is constructed of wood frame with flat composition and cedar shingle roof. Over each classroom there are two sawtooth skylights so arranged that they illuminate the room from the single large ceiling light. The top lighting of the classrooms has been particularly effective in that it gives a soft diffused light and removes all shadows.

The classrooms are fitted with blackboards on three sides. Behind the teachers' desk a portion of the blackboard is counter-weighted so that additional space is available. The rooms also contain book cabinets and wardrobes. An exit door leading immediately outdoors is located in each room so that classes may be dismissed without passing into the auditorium or thru interior parts of the building.

The electrical equipment is complete in every

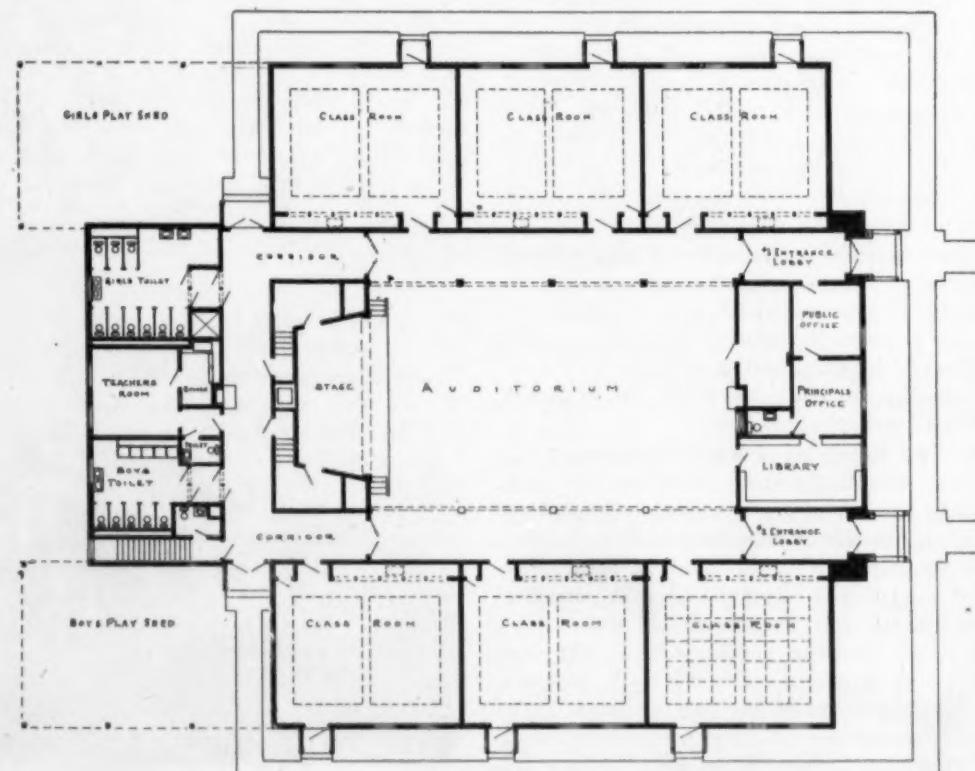
respect. Classrooms and corridors have carefully designed lighting fixtures and the teachers' kitchen is equipped with an electric range. An electric fire gong is connected with three stations and electric service is provided for the motion picture booth.

The building is heated and ventilated by a hot air plenum system, with thermostatic control. The fresh air intake is upon the roof and the fresh air enters each classroom at two points. The classroom air is exhausted thru the wardrobes. The heating plant is located in the basement and is entirely isolated from the remainder of the building by masonry walls, fire-proof doors and a concrete slab ceiling.

Including the construction charges, architects' fee and furnishing, the building cost, approxi-

mately \$70,000. This amounts to 21 $\frac{1}{3}$ cents per cubic foot, or \$250 per pupil on the basis of 280 pupils. The cost of the building is increased by \$5,000 due to the fact that a considerable amount of water and quicksand were encountered in placing the foundations of the heating plant for which a considerable amount of expensive construction was necessitated. The building was built under government specifications and under the very strict governmental specifications, which also doubtlessly increased the cost by a considerable item.

The building is identical, except for minor changes, with a structure planned and erected by Mr. Albertson at Bremerton for the U. S. Housing Commission. The illustrations show both buildings.



FLOOR PLAN OF THE NEW SCHOOLHOUSE, CHARLESTON, WASH.
A. H. Albertson, Architect, Seattle.



JUNIOR HIGH SCHOOL, NEWTON, IA. Temple & Burrows, Davenport, Ia. Fugard & Knapp, Chicago, Ill., Associate Architects.

The Building Program of a Small City

H. P. Smith, Superintendent of Schools, Newton, Iowa

Newton is a small manufacturing city located in the central part of Iowa. Its present population is approximately seven thousand, an increase of more than 40 per cent in the last ten years. Like many another city Newton has been confronted in the past fifteen years with two problems—an increasing school population and the necessity of replacing old school buildings with modern and up-to-date plants. Furthermore the development of certain fundamental industries in this community compels the people of the city to look forward for many years to an ever-increasing population. Consequently to build adequately for the present would be to disregard the needs of a few years hence.

A high school building with a capacity of three hundred pupils was built in 1908. This was followed in 1914 by the erection of an eight room elementary school building with auditorium and gymnasium, kitchen and manual training rooms—in fact a complete elementary school unit. The year after this building was erected it was filled to capacity. The movement that was designed to relieve for several years to come had merely served to bring the building situation up to the point where it met the needs of that year. In other words, there was no anticipation of the future.

Meanwhile the central part of the city had inherited an old school building of the box type, three stories in height, erected in 1871. It was a fine building for its day, but it had served its purpose and the community had had value received therefrom. In fact it was estimated by one of the local mathematicians that it had cost originally a little less than 1 cent for each pupil-day during the entire time of its existence, that is, it had cost less than a cent a day for each child enrolled. That the building should be scrapped everybody admitted; what to put in its place was a puzzle to all. To replace it with thirteen rooms was

merely to take care of a contemporary need. It would neither provide for the future nor relieve the congestion in the high school building then less than ten years old.

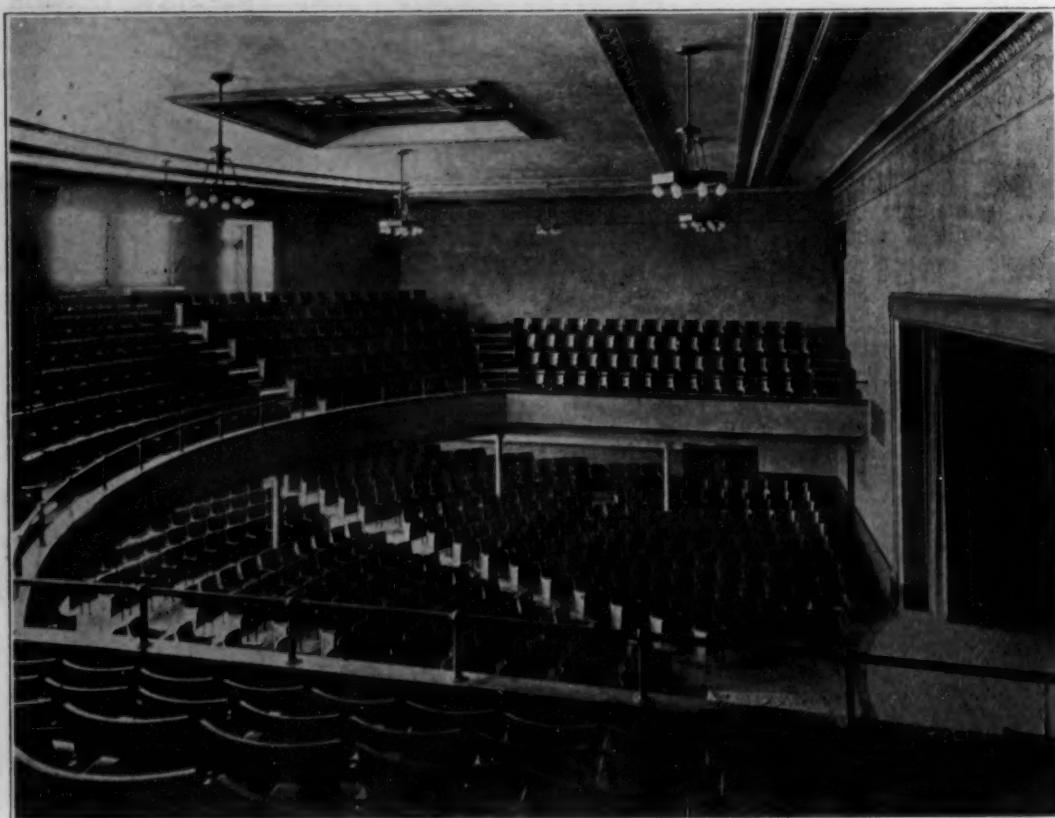
The board of education then finally determined upon a survey and invited the College of Education of the State University of Iowa to conduct it. The board felt that an outsider could see certain tendencies impartially that would not be so apparent to those near the scene, and, further, that the recommendation of an authority from the outside would carry considerable weight. A careful study was, therefore, made by the committee of the condition of the buildings of the district, the probable future growth of population including trend and rate, and the existing educational program together with a proposed future program which included a junior-high-school organization and a broadening of the vocational subjects offered.

The report pointed out three problems: A great congestion in the high school which had to be relieved within a short time, a rapidly increasing elementary school population in the west part of the city, and a grade school building in the central part that was ready for the scrap heap—a building that was not fit from the standpoint of light, sanitation, or safety for even a part of the children of the town. The committee recommended specifically that a small grade school in the west end should be completely remodelled and that an addition consisting of classrooms, special rooms, toilets and an auditorium and gymnasium be erected. It recommended further that the two grammar schools housed in separate buildings be united in a junior-high-school organization that could better realize the aims for which the grammar schools were striving, that the first year of the high school, the ninth grade, be taken from the high school and united with the seventh and eighth grades to form a three-year junior high school. It recommended that this organization

be housed in a new building to be erected in place of the thirteen room elementary school which was to be torn down. This junior-high-school building should be so designed that it would supplement the high school building located just across the street; that is, the new plant should contain a large gymnasium, an auditorium, and adequate provisions for household arts and manual training, their rooms in the high school building having long since been outgrown. It also recommended that this same building should house a number of elementary schoolrooms to accommodate pupils from the central part of the city who were attending the old elementary school.

The campaign for the bonds for this building program was conducted in such a manner that the bonds, amounting in 1917 to more than a quarter of a million, were voted by a very large majority. The result was a practically new elementary school building and a magnificent junior high school plant, the latter costing at 1917 prices more than a quarter of a million.

It is the purpose of this article to describe this building and to point out how it is designed to serve not only the present needs of this community but to meet the needs of the future as well. The building is a three story, fireproof structure, floor plans and photographs of which accompany this article. The lighting has been carefully planned so that all classrooms have a glass area equivalent to one-fourth or one-fifth of their floor areas. In the second story in every instance where the span is more than 23 feet there is a skylight. On the other floors there is but one instance where the span exceeds 23 feet and that is in the woodworking shop. Toilets for each sex are located on each floor together with retiring rooms for men and women teachers on the main floor. The hall and toilet floors are terrazzo while all classroom floors are hard maple laid over reinforced concrete floors built up of gypsum domes. The



AUDITORIUM, JUNIOR HIGH SCHOOL, NEWTON, IA.

second floor corridors have several hundred built-in lockers for the accommodation of the junior high school pupils.

The mechanical equipment of the building approaches perfection. Each room has direct radiation sufficient to heat it in the coldest weather while there are two fans, one for all the classrooms and another for the auditorium and gymnasium, thus making it possible to heat the part of the building in use without heating all. The radiation, both direct and indirect, is thermostatically controlled, and there is a humidifier automatically operated in connection with each fan so that the proper amount of humidity may be supplied. There is also a vacuum-cleaning machine capable of taking care of the entire building. An interior telephone system connects all the rooms in this building as well as the heating plant, which is separate, and all the rooms in the senior-high-school building across the street. A master

clock with bells and 33 secondary clocks handles the program and class period bells.

The ground floor, which is located but two to three feet below the terrace grade, contains the gymnasium, dressing and shower rooms for both boys and girls, shops and drawing rooms, the household arts department and the room for the mechanical equipment. The gymnasium has a clear floor space 79 feet by 53 feet, a store room for apparatus and a balcony seating approximately 375 people. There are rooms for printing, woodworking, drawing and forging, together with two store rooms. The stock is kept for the most part in the shop itself. The machinery and benches are also located in this room to duplicate actual shop conditions as far as possible. The household arts department has a cooking laboratory, sewing room, fitting room, laundry, model dining room, model bed room, and a classroom for recitation purposes marked "unassigned" on the plan. There are locker closets with 9 inch by 9 inch divisions in the

sewing room for the girls taking sewing, and a similar arrangement in the corridors beside the kitchen for the aprons of the girls working in the cooking laboratory.

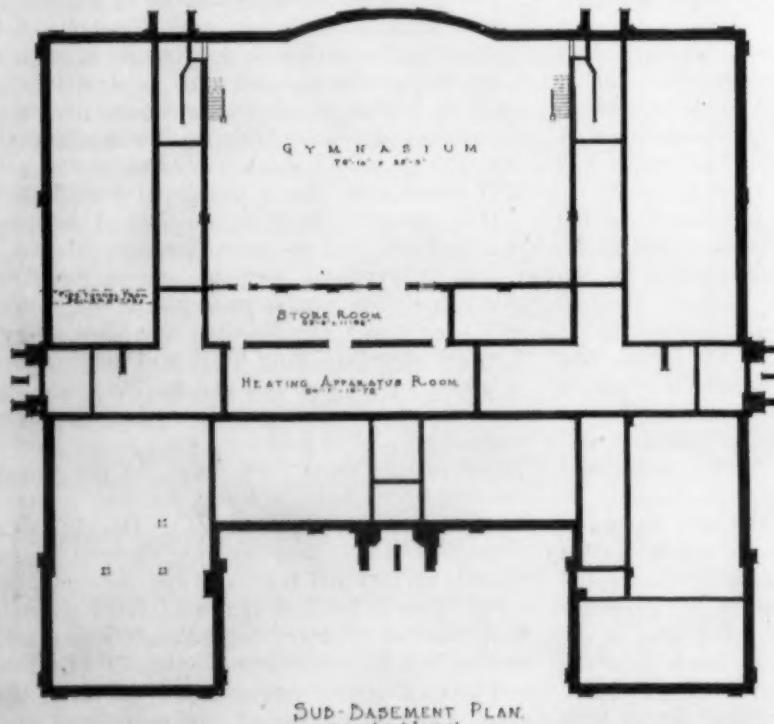
The main floor contains ten classrooms, a teachers' rest room, an office with book supply room, and the main floor of the auditorium with the stage and dressing rooms. The seven classrooms on this floor equipped with wardrobes are now used for elementary school purposes. In other words, on the main floor of this building there is an elementary school consisting of a kindergarten and the first six grades. These rooms are equipped with desks of a movable type not only for the benefit of the children but in anticipation of the future needs of the school as well.

The main floor of the auditorium seats approximately seven hundred people. The stage is adequate for ordinary school purposes but a little small for staging an operetta or an entertainment requiring the shifting of a large number of people on the stage very rapidly. Nor is this situation without design. It was found that increasing the size of the stage would have reduced the seating capacity of the room considerably or increased the cost of the building out of all proportion to the gain secured.

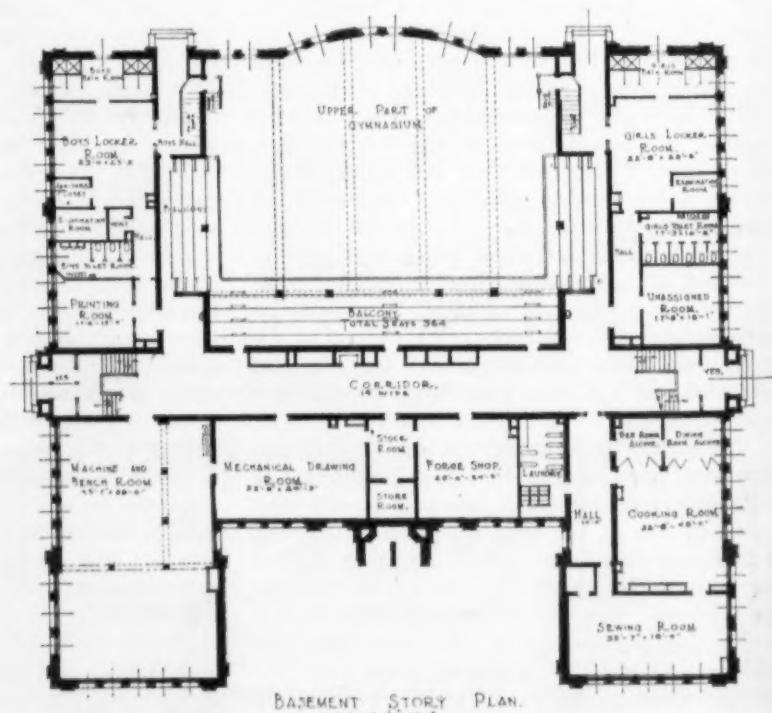
The auditorium is lighted by windows in the rear and by a large skylight. The stage is equipped with a reasonable amount of scenery. The balcony which opens into the corridor of the second story seats about three hundred fifty people and supports the moving picture booth in which is installed a Powers 6B anamograph.

The auditorium with its seating capacity of 1,050 is excellent from every point of view. Its acoustic qualities are splendid, its seats comfortable, the lighting adequate and the wall decorations and velour curtain very pleasing to the eye. It is used not alone for school assemblies and school functions but as a community center and for all functions of such a nature that they may be held in a high school auditorium. It is undoubtedly true that this auditorium is doing much to bring the school and the community together and to make them feel that they are one in aim and in purpose.

The second story contains, in addition to the balcony of the auditorium, the following rooms: Two laboratories for elementary science, five classrooms, an office with a supply room, and



FLOOR PLANS OF THE JUNIOR HIGH SCHOOL, NEWTON, IA.

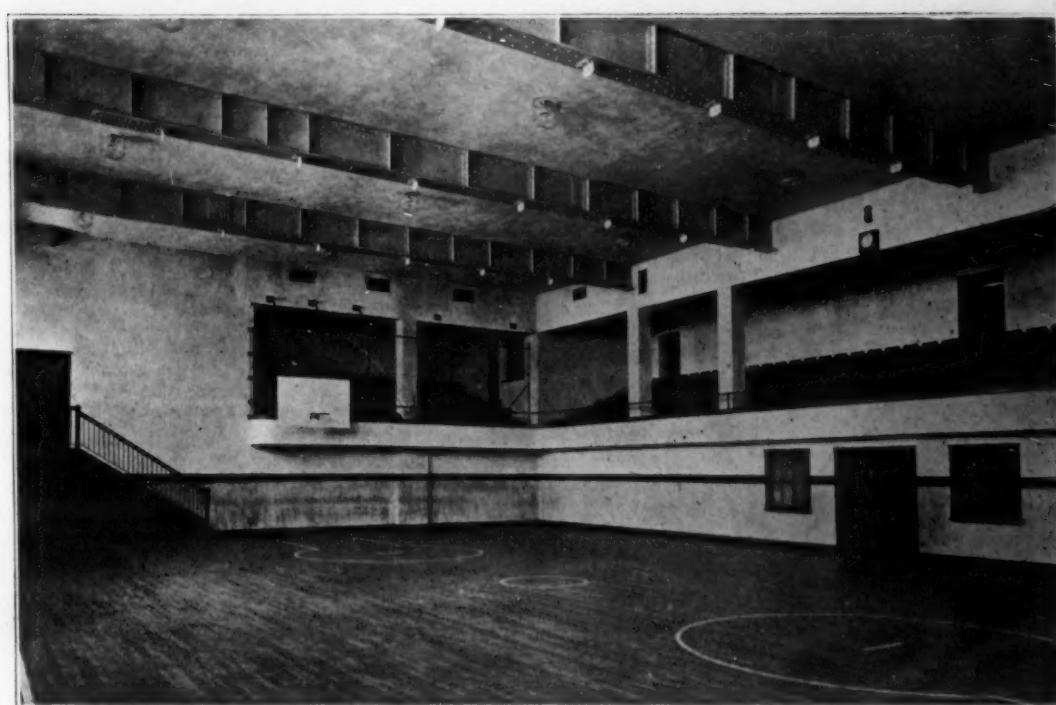


three home rooms for the junior high school, marked on the plan as "study" rooms.

The junior high school is organized on the "home room" plan, that is, the pupils are divided into groups of 100 to 128 each, and each group is placed in charge of a teacher called the "home room" teacher who not only keeps the attendance but also acts as the adviser and inspirer of the boys and girls in her charge. In other words, this supplies in a measure the lack of personal contact so often argued against the departmentalization of work in the seventh and eighth grades. It also breaks up the pupils into small groups so that instead of having four hundred in one room they are divided into three groups of approximately one-third that size. It is possible to organize any number of additional groups not exceeding thirty and place them in the various classrooms of the building.

The building anticipates the future in a very effective manner. The seven rooms equipped and used at present for elementary school purposes may be changed at any time into junior high school classrooms by removing the elementary school furniture, which is of a movable type. These rooms may even be used as small home rooms if the demand for more becomes acute as it probably will in a short time. In other words, a much larger high school may be housed in the future merely by building additional elementary schoolrooms in buildings properly located and turning the present elementary schoolrooms into junior high class and home rooms.

The high school organization in Newton is unique in that the high school is a junior-senior high school of the six-year type and a single administrative unit. Teachers teaching in the senior high school may also teach in the junior high school and junior-high-school teachers with degrees may be called upon to teach senior-high-school classes. One principal supervises the work of the six-year organization, and the interior telephone system, connecting as it does, all of the rooms in both buildings with the office of the principal makes this entirely possible even with the two buildings. Furthermore, certain types of work are offered exclusively in one building while other types are offered only in the other. For example, all commercial work is now offered in the senior-high-school building



GYMNASIUM, JUNIOR HIGH SCHOOL, NEWTON, IA.

while all physical training, household arts, shop work and drawing are given only in the junior-high-school building.

Yet the junior-high-school pupils are very carefully supervised under the home room plan, while their older and more mature brothers and sisters in the senior high school have more freedom. Where there is a choice between shifting whole classes from one building to another, or teachers, the teachers are invariably asked to go from one building to the other. The main library facilities are to be found in the study room of the senior high school but there is an extensive junior-high-school library being developed in the home room used by the ninth grade pupils, and the other home rooms are being equipped with libraries adequate to the needs of their occupants.

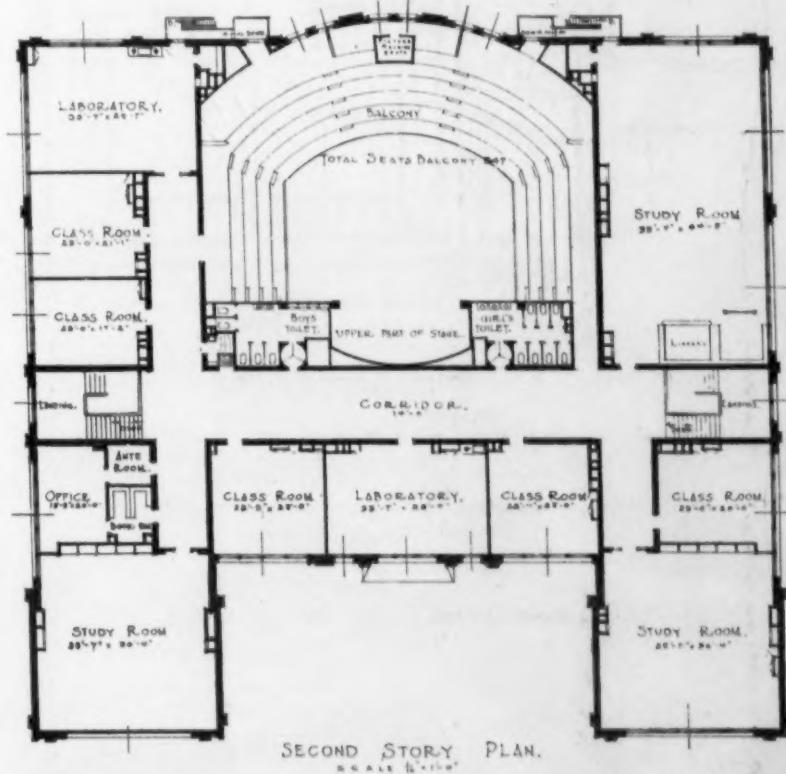
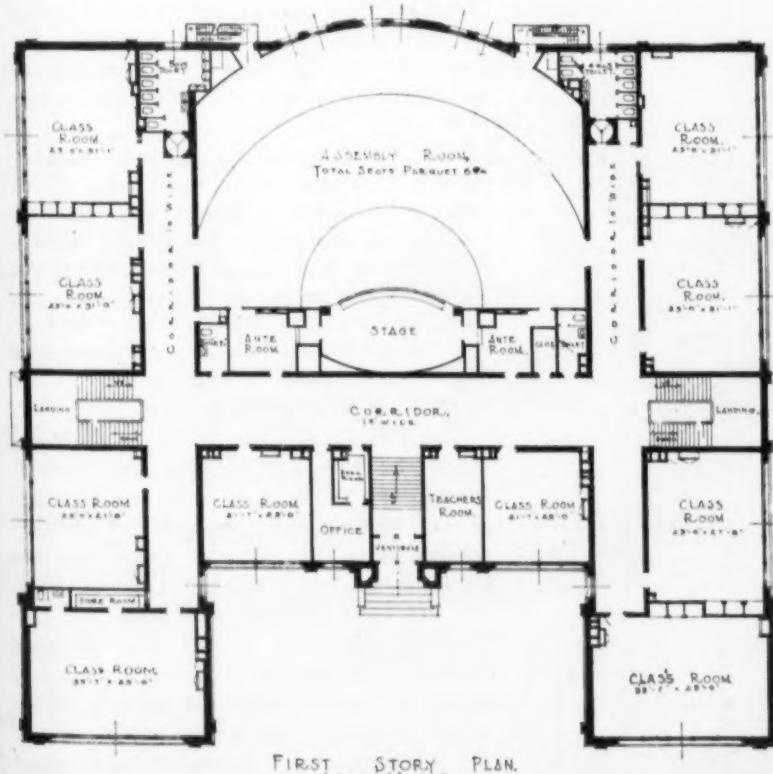
The purpose of this article has been two-fold. It has endeavored to point out how a small but growing city met its junior-senior-high-school situation in such a way that it has a plant adequate to house ultimately an organization of twelve or thirteen hundred pupils and it has

attempted to point out the distinctive junior-high-school features of a building planned deliberately to accommodate that group of pupils who are usually given the old building while their more fortunate brothers and sisters are presented with the "brand-new" plant.

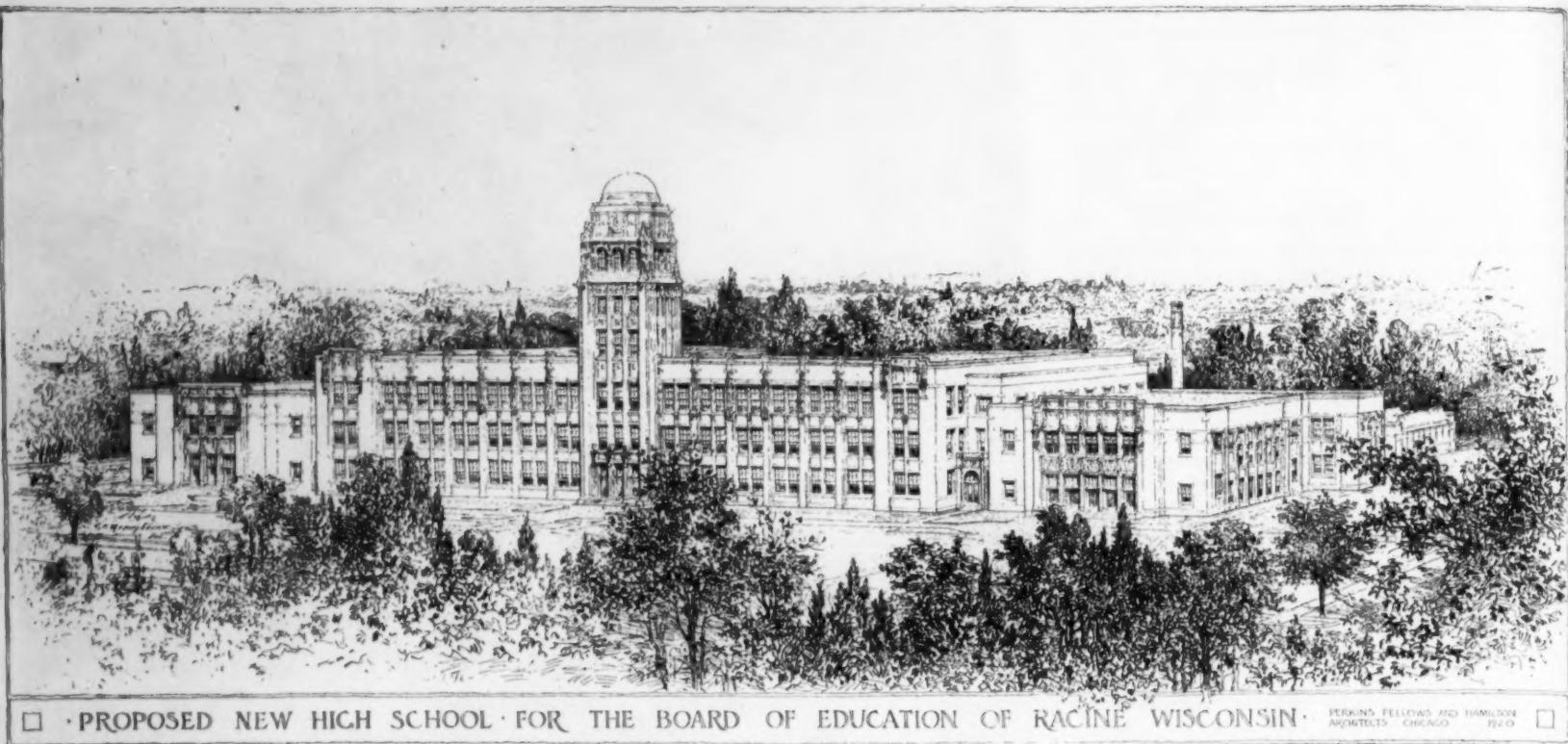
PLACE INSURANCE.

The school board at Watertown, S. D., has placed a blanket insurance policy in the amount of \$74,000 to protect itself against accident and illness which may occur among the 74 instructors in the local schools. The cost of the protection to the school district is \$1,460, but it is pointed out that this sum will be more than saved thru the sums which will be received for the payment of salaries of teachers who are ill during the school year.

Under the plan of insurance as adopted by the Watertown board the instructor who is ill continues to receive his or her regular compensation while the board of education receives from the insurance company a sum at the rate of \$25 per week. In case of accidental death the district will be reimbursed to the amount of \$1,000. So far as is known Watertown is the first city in the United States to adopt this form of insurance for its instructors. The action was recommended by Superintendent T. G. Harmon.



FLOOR PLANS OF THE JUNIOR HIGH SCHOOL, NEWTON, IA.
Temple & Burrows, Davenport, Ia., and Fugard & Knapp, Chicago, Ill., Associate Architects.



PROPOSED NEW HIGH SCHOOL FOR THE BOARD OF EDUCATION OF RACINE, WISCONSIN.

Two Urban High Schools in the Middle West

RACINE, WIS., HIGH SCHOOL.
MANITOWOC, WIS., HIGH SCHOOL.

Perkins, Fellows & Hamilton,
Architects, Chicago, Ill.

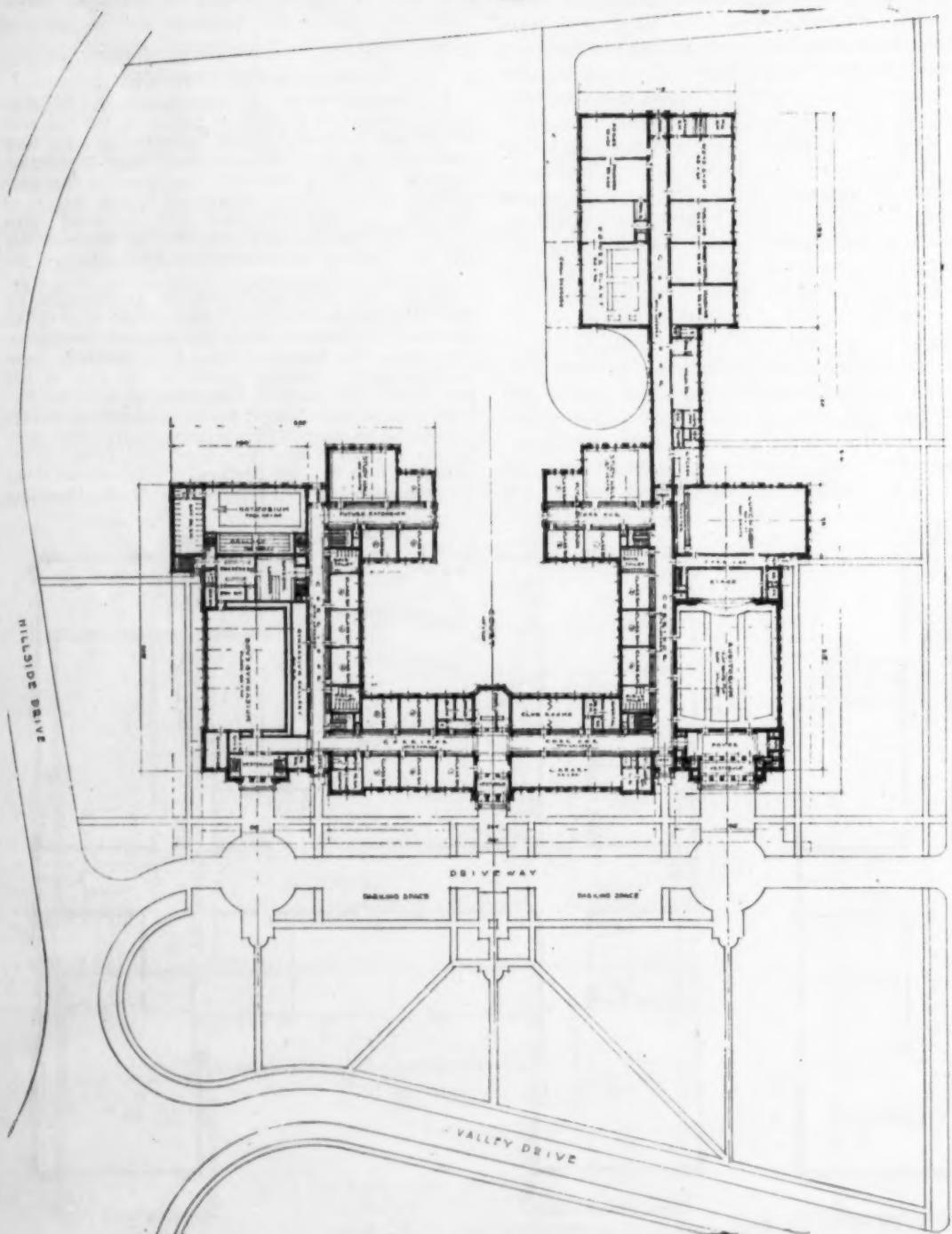
A peculiar condition influences high school planning at the present time. It is not the lack of sufficient funds—there is nothing peculiar about that, instead, it is the fact that in many localities it is impossible, legally, to raise by direct levies or by bond issues, funds ample enough to pay for construction at one time of schools imperatively needed today, even if the need for future enlargements is ignored.

Cessation of school construction since 1914 or 1917 has left many children without needed school facilities, urban populations have increased greatly and rapidly and the cost of building construction has trebled.

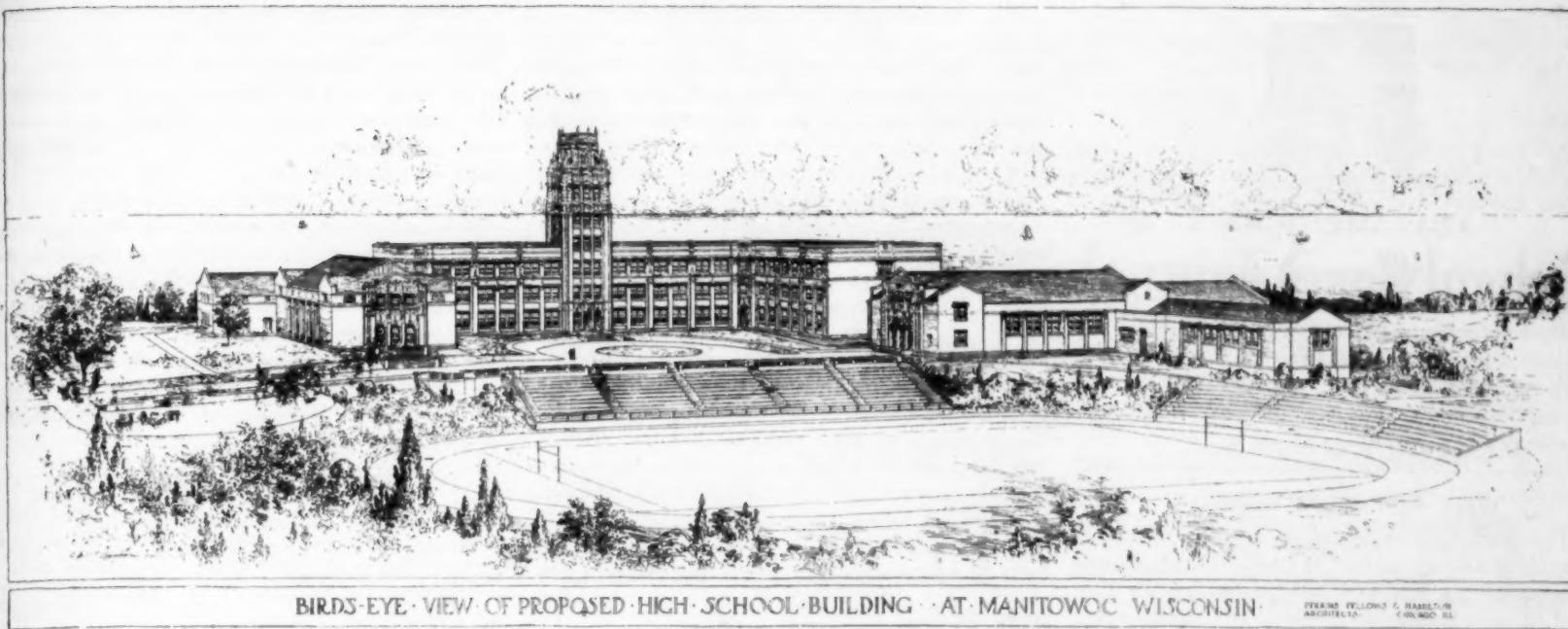
Under these conditions boards of education are obliged to adopt a building program that may be distributed over a period of years, anywhere from three to ten or more years.

Under such circumstances it is necessary to devise a plan which shall meet all requirements when complete and shall be capable of use during the period between commencing and completing construction. Sub-divisions must be so arranged that partial or sectional building may be done, and further the use of the first units must not be obstructed by the absence or the erection of subsequent parts.

The plans made for the cities of Manitowoc and Racine, Wisconsin, and illustrated with this article meet those requirements as well as other more fundamental and permanent demands. They may or may not be built in installments. One of them will not be if the citizens concur with the board of education in the ensuing bond election. Cities of the size of Racine and Manitowoc present another element of interest in the problem which has been met. Each requires but one senior high school and each possesses a large site, but in each case a large building with all modern edu-



GROUND FLOOR PLAN, HIGH SCHOOL, RACINE, WIS.



BIRDS-EYE VIEW OF PROPOSED HIGH SCHOOL BUILDING AT MANITOWOC, WISCONSIN

PERKINS, FELLOWS & HAMILTON, ARCHITECTS

ARCHITECTS' SKETCH FOR HIGH SCHOOL AT MANITOWOC. Perkins, Fellows & Hamilton, Architects, Chicago.

ecational and vocational facilities and a student capacity equal to those provided for in our largest metropolitan centers is required.

It is also necessary to accommodate junior high school pupils. Children in the seventh and eighth grades may or may not be housed in these buildings, but at least the option must be given the boards to do this if they see fit. These problems therefore must be met by buildings larger and more diversified in character than any outside of the great cities. They may become central to a number of surrounding junior high schools later on as the cities grow and the system develops.

The same general description will apply to each plan. Such differences as occur are due to the controlling conditions of the site at Manitowoc. At Racine the site is large and level whereas at Manitowoc the ground available for building is roughly speaking in the form of

a crescent descending rapidly either side of the curving center line. This building area descends about 10 feet from northwest to southwest.

In both Racine and Manitowoc low areas exist, ample in size and convenient in location for athletic fields and amphitheaters and have been reserved for those purposes. An old sand pit north of the lunch room is available for a small out-of-door theater at Manitowoc.

In each instance a group plan has been chosen, not a group plan as usually conceived by architects consisting of several more or less detached units but instead a group plan from what may be termed the educators' point of view.

The first element in the group to be constructed is the academic and administrative unit planned in each case to be extended in the future. At either side or end other units di-

rectly connected are shown for subsequent erection, one unit, the auditorium, to which may be added the lunch room later if desired and at the other end or side the physical culture unit comprising gymnasiums, natatorium and appurtenances. These again may be sub-divided and built at one or at different times.

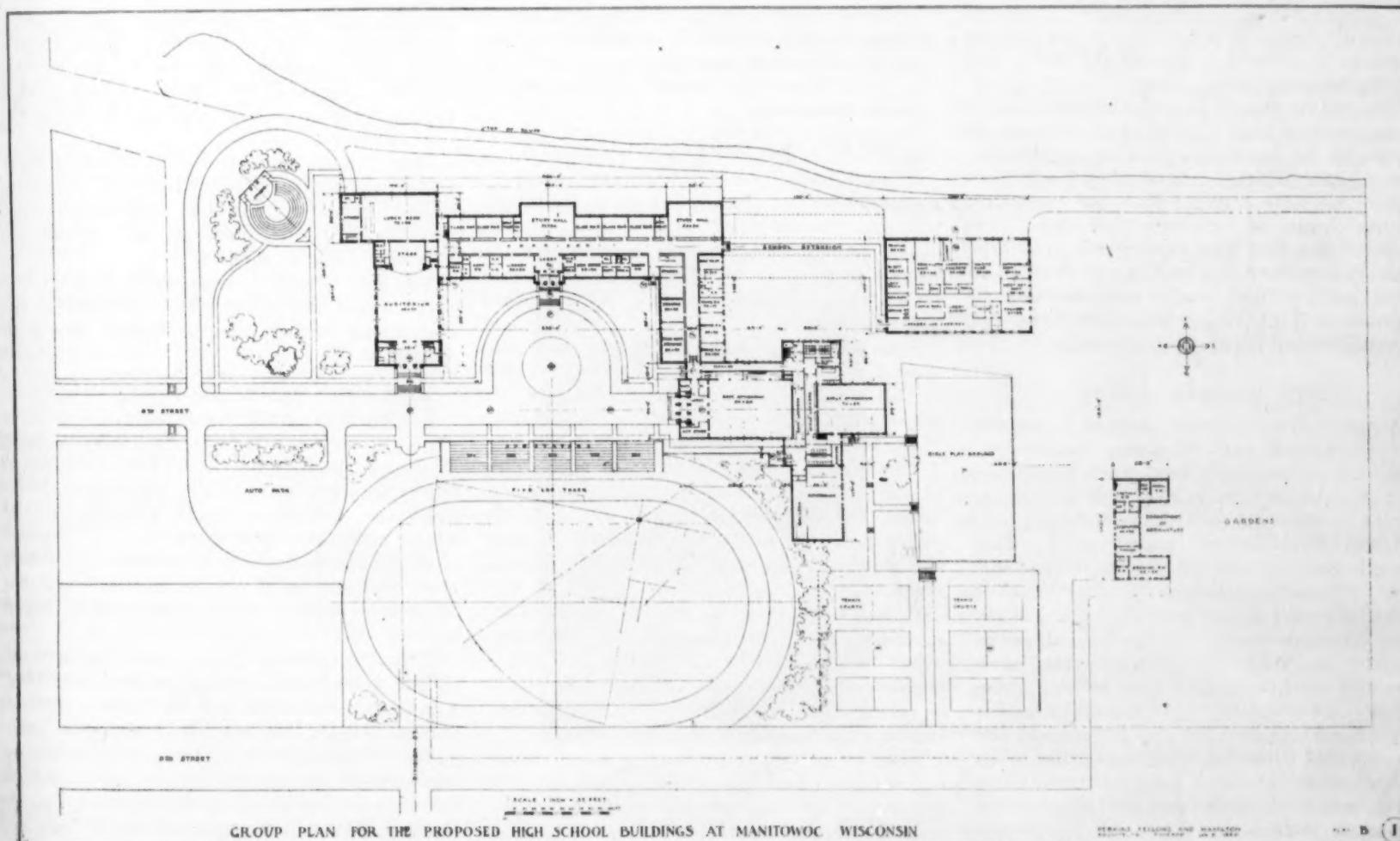
Both plans show one story shop units capable of expansion or interior change to suit future vocational training demands.

Parking space for automobiles as well as covered storage for bicycles is provided in each plan.

Tennis courts, separate playfields for girls and large garden spaces are shown as each site comprises more than twenty acres.

The student capacity in each school is estimated at 1,200 at the beginning and 1,800 when complete. No satisfactory estimate of the cost

(Concluded on Page 87)



GROUP PLAN FOR THE PROPOSED HIGH SCHOOL BUILDINGS AT MANITOWOC, WISCONSIN

PERKINS, FELLOWS & HAMILTON, ARCHITECTS

B (1)



THE AMERICAN School Board Journal

WM. GEO. BRUCE { Editors
WM. C. BRUCE

EDITORIAL

WHY A SCHOOL BOARD?

The disturbed relations in activities where the elements of authority and compensation play a part is finding ample expression in the field of school administration. Some odd controversies, undreamed of a few years ago, come to the surface here and there.

While the teachers' salary question has become quite common and is met with a reasonable degree of speed, in all sections of the country, the issue, in some instances, is going deeper into the relations between school boards and the teaching forces, and is culminating into a contest of school board government versus teacher government.

At Eugene, Oregon, the issue has become so pronounced that a local school welfare league has resorted to full page advertisements in the newspapers in discussing the issues. It asks the public on the eve of a school election: "Can you have efficiency in your schools without the discipline, control and authority of a school board? Can you expect good schools if the teachers dictate who shall be their superintendent? Can you expect good schools if the teachers dictate what method of supervision of their work shall be employed?"

There can be but one answer to these vital and pertinent questions. The final authority must be vested in the school board. There can be no divided or mixed authority, nor can the teachers be allowed to dictate the policy that shall govern the school system.

The public should be well informed on the issue involved here. If the pupil, the real objective of the American system of popular education is the object of concern then disciplinary powers can only emanate from one recognized source. Authority transcends from school board to superintendent, from superintendent to principal, from principal to teacher, and from teacher to pupil. This organic cohesion must be maintained if the school machinery is to work smoothly, expeditiously and efficiently.

BUY SCHOOL BONDS.

A nation that has been addicted to speculation in mining and oil stocks, in Mexican plantation schemes, and every other conceivable get-rich-quick enterprise, may well turn its attention to more substantial investments.

School bonds deserve consideration. They not only ensure a safe return on the investment made in them but constitute a vital factor in the stability and prosperity of the nation. While these have gone begging for recognition, money has gone into every wild cat scheme that tricksters and adventurers have been able to devise.

True, industrial and government securities have offered attractive returns to investors and no one would advise ignoring them. But, when the choice lies between a hazardous speculation and a safe investment the school bonds must receive the preference.

SCHOOL BOARD JOURNAL

The general public, including the wage carner, has come more into the habit of investing in stocks and bonds, but it has not reached that stage of discrimination where it distinguishes clearly between the safe and the unsafe. At any rate, the mania for speculation is strong and militates against the more safe investments.

Community pride and patriotism should turn its attention to the needs of the educational interests. In the purchase of school bonds self-interest can be combined with a service to society. Good citizenship demands such service.

EXECUTIVE SCHOOL BOARD SESSIONS.

Executive sessions are never popular with the press and the public. Secrecy breeds suspicion. The public that pays the shot believes that it has the right to know exactly what transpires behind the four walls of a school board session.

When the school board has a problem in hand that cannot wisely be discussed openly, and resorts to extraneous conferences the press is apt to cry "star chamber" methods. The board becomes alarmed and opens its doors.

The question here arises whether situations and conditions may arise in the life of a school system that require secret action and disposition. The answer is decidedly in the affirmative. All questions, for instance, involving the moral character of teachers and pupils must be dealt with without the light of publicity. In fact, publicity on certain situations apt to arise would do untold harm to the morals and morality of the pupil constituency.

Several years ago several immoral persons had found their way into the teaching forces of a leading American city. The board conducted its investigations publicly. The scandal attracted national attention and became the gossip of thousands of pupils. Another city about that time met with a similar situation. Its school board wisely conducted its investigation behind closed doors, secured the facts and acted promptly in removing the offending characters. The press and public remained in ignorance.

Which is the better method? Warranted secrecy or harmful publicity? School boards must determine what course should be chosen when problems of a delicate nature arise, and if wisdom dictates executive sessions then they must be adhered to regardless of the criticism that may follow. The moral protection of the pupil is paramount.

SELECTING SUPERINTENDENTS.

A good sized city in the Northwest looked for a superintendent. They found one in the Southwest who "looked good." The school board was about to elect him when someone said: "I learned from a man who lives in that town that he is a weak sister." That settled it. The board voted for another applicant.

Soon after a city in the Middle West also considered the Southwest man. They learned that he had been turned down by the Northwest city school board, but one member of the board said: "Let's look him up in his own home town."

This board member traveled to the home town of the applicant, remained three days, ascertained the standard of the schools, saw the proper people as to the superintendent's record and standard, and came back with a favorable report.

He had traced down the town gossip about the superintendent, and measured the differences which had arisen between him and his board members, his principals and teachers, and placed an accurate estimate upon the record of the man and his value as a school administrator.

Here is an instance where a school board was not guided by hearsay and gossip, nor was it scared off by those differences that will always arise where the superintendent is progressive

and the school board less so. The board got the man it wanted.

What may be deemed elements of weakness in a superintendent by one board may sometimes be regarded as elements of strength by another. Some superintendents travel too fast to suit one body of men and not fast enough to suit another.

But, school boards considering the appointment of a superintendent should not hesitate to look up thoroly the record of the applicant and make a proper allowance of the differences that have arisen between him and his former contemporaries. Local conditions vary greatly and the superintendent who has not been able to do his best in one may become a decisive success in another.

THE N. E. A. REORGANIZATION.

For several years it has been apparent that while the National Education Association had become strong in membership its annual gatherings were in reality not as representative of the educational workers of all sections of the country. This was due to the fact that these gatherings were in large part made up of a transient membership, and it was this transient membership which frequently threatened to control the destinies of the organization.

The annual meetings drew their attendance more largely from the section of the country in which they happened to be held. This local or sectional membership which frequently constituted only a minority of the whole membership held the balance of power. The non-attending majority thus remained unrepresented in the affairs of the organization.

A plan of organization whereby the delegate system comes into play was devised and was adopted at the Salt Lake City meeting. It provides that all educational bodies thruout the country, state and local, may be represented by delegates. Also that state school officials are entitled to seats in the delegate body. The financial support extended to the national body is based upon the membership strength of the several constituent organizations.

This plan possesses a twofold merit. It obviates the control of a transient or sectional membership, and at the same time places the organization upon a representative basis. All the educational interests of the nation will have a voice in the movements, departures and efforts of the national body.

Here it must be assumed that the constituent bodies will realize their relation and obligation to the national organization, send their delegations to the annual meetings, and provide the necessary financial support.

The plan adopted is democratic in spirit and practice and will reflect the aspirations of the educational workers towards higher service to the nation.

THE EDUCATOR—CONVENTIONIST.

The trend of thought governing the greatest of all professions is well expressed thru the gatherings of the National Education Association. While the great stars in the educational firmament are arrayed in larger numbers at the winter meetings it is also true that the summer meetings assume importance because they determine the policies of the organization and because they cover a wider range of educational activity.

What the summer meetings lack in depth of subject matter and big star performances they gain in variety, color and the human interest phases. They afford a study in the great composite of educational workers, the manner of transmitting the message of the hour, and in the receptive calm of a great constituency. A fraction at least of the rank and file is there.

Here the teachers of America give evidence of their progressive tendencies, or the lack of them, their conception of a noble calling, and incidentally of their forensic powers. The humblest among them has a chance to be heard. They bring to the surface their whims and caprices as well as their wit and their wisdom. On the whole, they constitute an eager and responsive audience, well mannered, modestly gowned and genially tempered.

The variety, color and human interest phase gain emphasis at the hands of those who courageously mount the platform and those who more modestly rise from the floor. Styles of oratory vary, color becomes variegated, pith and pathos follow each other in rapid succession. The pointless orator confronts the pointed speaker, the country mouse rivals with her city sister, the emotional confronts the hardheaded.

Then there is the obscure who strives for national distinction, the popular who is unwisely aggressive, and the overzealous who is suddenly bumped. It soon becomes apparent that deliberation and discussion have a tendency to chasten the reckless and encourage the timid, besides bringing an abundance of knowledge and information to all.

Educational conventions are not unlike conventions dealing with commercial, economic and technical purposes, except perhaps that they are less explosive and more subdued, less picturesque and more detailed, less oratorical and more grammatical. They afford an opportunity to see the American teacher in the composite, to form an estimate of their ideals and tendencies, and stimulate an appreciation of the part they play in the progress of a great nation.

WHO BOSSES THE JANITOR?

It would hardly seem likely that the question of authority over the school janitor could become an issue in school administrative deliberation. Yet, Philadelphia reports a case in which it took a school board committee a year to determine whether the janitor bosses the school, or whether the principal bosses the school, including the janitor.

The janitor was charged with disobedience and insolence, and his removal was recommended by the principal. The janitor boasted of his "political pull," with the result that the principal resigned, and it was not until the case was aired in the press that the obstreperous janitor was removed.

The administrative regulation involved here seems so obvious as to eliminate all further discussion, but when a leading newspaper deems it necessary to devote a half column editorial condemnatory of a befogged conception of relative authority, certain conclusions must be drawn.

There can be no question that the principal is the authoritative head in the immediate management of the school, and that teachers, pupils and janitors must come under that authority. The regrettable part is that political influence is not entirely expunged, as it should be, from the administration of the schools of the country.

PROFESSIONAL ETHICS QUESTIONED.

In commenting on an editorial which appeared in these columns last month on professional ethics as applied to schoolmen, a "Superintendent's Wife" expresses grave doubt "whether honesty and devotion to duty really pay."

The writer cites an instance where a superintendent has adhered to his contract, declining flattering offers from elsewhere and thus making a sacrifice to the cause of education, only to find himself supplanted at the end of the school

term by the aggressive applicant for his position.

The exact facts attending this particular case are not stated, hence the inference that unfairness and injustice had been practiced cannot be disputed.

It remains, however, that unfair practices are not in the end upheld, whether these are engaged in by school boards or by school superintendents. The school board that engaged in them will sooner or later be discovered by the public; the superintendent who gets his job by unfair means will ultimately reveal himself as an unfair man to the board and his contemporaries. He cannot last and succeed in professional life.

What simple honesty means in the channels of commerce and trade, ethical conduct means in the professional walks. The dishonest and unethical may succeed in one transaction but like the porch climber he is nabbed in due course of time. Character has its value, and those who assert it may suffer a temporary disadvantage, but in the end will meet with the recognition due them.

A HAPPY TEACHER.

To judge from newspaper reports and public utterances of leading educators, teachers have been unhappy during the past five years. The high cost of living has not been offset by adequate salary increases so that teachers have been compelled to be pessimists—to see the hole for lack of a whole doughnut.

We think that occasionally there is still to be found a teacher who does not brood over her sad lot, who is not feverishly writing to Washington for a civil service appointment, and who is not considering a change of jobs with the gum chewing telephone operator in the commercial hotel. Just recently a little teacher in a Middle West city had the audacity to write the editor of her favorite daily, concerning the pleasures and rewards of her profession. She pointed out the privilege she felt in associating with fresh, healthy, innocent little children, of guiding and helping them in their first steps toward knowledge and living, of moulding and shaping their characters. She wrote of the respect with which she is held by the community and of the recognition that comes to her purely as a teacher. She found satisfaction in knowing that she is a militant exponent of democracy as effective in her field as the soldier who went to France. And girllike she closed with this very human statement:

"I am given short hours of employment, every



MR. UEL W. LAMKIN.

Director of Vocational Education, Federal Board for Vocational Education, Washington, D. C. Mr. Lamkin was appointed in July to succeed Mr. C. A. Prosser, first director under the Smith-Hughes Law.

Saturday off, a winter and a spring vacation, and two long and glorious summer months of freedom. I desire nothing better than the continued success of my profession."

The editor of that paper has the safety of this little woman in his charge. For if he breaks the editorial seal of secrecy, it is certain the walking delegates of all the 106 teachers' unions will seek her and mete out fit punishment.

LOYALTY IN THE SCHOOL SERVICE.

Here is an indictment against a school superintendent: "He is hard working, devoted to the schools and has some good ideas, but he is timid, lacks the ability to delegate work," and "is disloyal to his official chiefs."

The reference to disloyalty reminds us of a chapter in the life of the late Dr. Wm. T. Harris who, when he entered upon office as superintendent of the Saint Louis schools, found that several school principals were disloyal to him. His first impulse was to dismiss them. Upon second thought he concluded to investigate their work first and then determine upon a course of action later.

He discovered that they were among the most valuable men in the school system and that by proper encouragement they could be brought even to a higher stage of service. But, they were disloyal to the superintendent! At any rate, they did not like that official.

Well, were they loyal to anybody or anything? Yes, they were loyal to the school system, loyal to their duty, loyal to the school child. That was enough. Dr. Harris resolved that personal loyalty was after all a minor issue. He must overlook antipathy. The dominant factor was their loyalty to the interests of the pupil.

If the superintendent of schools is loyal to his trust it matters less whether he loves his contemporaries or they love him. In the end he must be measured by the results he achieves and not by his efforts to display loyalty to those above or about him.

In the relations between the several school administrative factors there should be courtesy and friendliness. Loyalty is a fine thing, but mere personal loyalty at the expense of the true interests of the schools, must be discouraged.

When Nicholas Murray Butler failed of a Presidential nomination the country intimated that for the present at least it wanted no more schoolmasters in the executive chair. The era of the editor is on. Well, we're beginning to feel chesty.

Objection was made to the steam roller methods employed at the N. E. A. business meeting. The objectors had successfully employed that huge apparatus in former years. It is always wrong when the other fellow operates the darned thing.

Educational conventions may lack in the vim and vigor of political conventions but when it comes to resolutions they dodge less and cover more. That's because they enjoy an intimate acquaintance with Noah Webster. The other knows Daniel better.

The little schoolmarm who wants to annihilate all school boards in the world is thankful that there is another school board in the next town. The second school board helps her to break her contract with the first.

The National Education Association elected Fred M. Hunter of Oakland, Calif., for its President. That ought to pacify the ruffled Pacific Coast for the defeat of Senator Hiram Johnson. Hunter is California's biggest progressive.

SCHOOL BOARD JOURNAL

tem; namely, (1) the accelerated group, (2) the normal group, and (3) the retarded group.

In recent years stress has been laid on taking special care of the retarded group which constitutes about 2 per cent of the children in the elementary grades. Since most of our leaders come from the more brilliant pupils, it seems to be the part of wisdom to make special provision also for this group in our schools.

The "opportunity room" provides for about fifteen retarded children. The fifteen representing the greatest degree of retardation (on the basis of mentality tests) will be placed in the opportunity room. This room will be taught by a teacher *especially adapted and prepared* for this type of children.

About 30 per cent of those children who are *capable and willing* to carry a heavier load will be permitted to go into the rapid (express) classes indicated on the chart by capital letters. Continuous *proof* of a child's ability to carry this heavier load constitutes his only *pass*.

Organization of Classes in Dover, Delaware

THE DOVER PLAN

Age	SENIOR YEAR	Age
17		15
16	11th Year G. (EXPRESS)	14
15	10th Year F. (EXPRESS)	13
14	9th Year E. (EXPRESS)	12
13	8th Year D. (EXPRESS)	11
12	7th Year C. (EXPRESS)	10
11	6th Grade B. (EXPRESS)	9
10	5th Grade A. (EXPRESS)	8
9	4th Grade	7
8	3rd Grade	6
7	2nd Grade	5
6	1st Grade	
5	Kindergarten	

port entitling him to continue with the rapid (express) class. His failure to do the required work will require that he be adjusted across the line with the normal group. Likewise, a child in the normal group may prove his ability and willingness, and be adjusted across the line with the rapid (express) group of children. These remarks apply to the elementary grades only,—making that part of the plan *flexible*.

Twenty-four credits are required for *graduation* from the junior-senior high school. The normal group can make the twenty-four credits in six years; the rapid group can make the twenty-four credits in five years, thus gaining one year in finishing the high school.

Promotions in the grades are by *classes*; promotions in high school, by subjects. The normal group of the high school carries four major subjects; the rapid group may carry five major subjects during a semester or throughout the year.

We shall *hold* for a *standard of attainment* in penmanship, art, music, spelling, and hygiene and sanitation during the junior period of the high school. After reaching the *standard* in

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FOR BUSY SUPERINTENDENTS

QUESTION OF TEACHER ETHICS.

The Michigan State Teachers' Association has before it a tentative draft of a code of ethics which reads as follows:

1. A teacher should actively affiliate with professional organizations and should become acquainted with the proceedings of the state associations.

2. A clear understanding of the law of contracts is incumbent upon a teacher. Since a teacher should scrupulously keep whatever agreement is made, he should refuse to sign a contract unjust and humiliating in form.

3. It is unprofessional for a teacher to sign a yearly contract to teach for a wage that is not sufficient to cover living expenses for twelve months.

4. It is unprofessional for a teacher to resign during the period for which engaged. He may ask to be released, by giving notice of not less than two weeks, but must in case of refusal bide by his contract.

5. It is unprofessional for a teacher to underbid a rival in order to secure a position.

6. It is unprofessional for a teacher to tutor pupils of his own classes for remuneration except by special permission of the school authorities.

7. It is unprofessional to call in or allow the use of a substitute except for serious illness or for other grave reasons.

8. Since teachers are rightly regarded as examples to pupils, a teacher should so conduct himself that no just reproach may be brought against him. Where liberty of conscience is not concerned, he should stand ready to make personal sacrifice, because of the prejudices of his community.

9. It is unprofessional for a superintendent or other school officer to offer a position to a teacher without first determining the willingness of the teacher's employer to grant a release.

10. It is not commendable for a superintendent or other school officer to visit, with a view to employment, a candidate at work, without the permission of his or her superintendent.

11. It is unprofessional for a superintendent to refuse to aid a successful teacher to secure worthy promotion within his own or another school system.

12. It is unprofessional for teachers to criticize co-laborers and predecessors, as such procedure tends to weaken the confidence in which the work of our profession is held by the community.

13. Teachers should be ready at all times to assist one another by giving information, counsel, and advice, and by such services and acts as teachers can perform without detriment to themselves or their work. Such reasonable service should be regarded as a professional duty for which remuneration beyond actual expenses should not be accepted.

THE "DOVER PLAN" FOR AN ELEMENTARY AND HIGH SCHOOL SYSTEM, 1920-1921.

W. B. Thornburgh, Supt. of Schools, Dover, Del. This plan is adapted to the "six-three-three" school system, in which the first six grades constitute the elementary grades and the next six grades constitute the junior-senior high school.

This plan attempts to provide for three groups of children found in every school sys-

SCHOOL BOARD NEWS

SCHOOL BOARD VERSUS TEACHER GOVERNMENT.

In some sections of the country the present industrial and social unrest has penetrated the school field and caused decided differences of opinion between the school authorities and the teaching forces.

At Eugene, Oregon, an interesting contest of this character has come to the surface. The so-called Public School Welfare League, representing the people, has taken a decided stand against the teachers, and comes out in full page advertisements in defense of the school board and the superintendent. In bold faced type it declares that the success of the teacher's cause would mean "a blow at Americanism" and a defense of "falsehood and revenge."

The advertisements are replete with terse sentences. Here are some of them:

Why a School Board?

Do we want a school board, or do we want teacher control?

If we want a school board we must uphold it.

If you do not uphold it you cannot expect representative citizens to undertake this duty, and school affairs will be administered by self-seekers and representatives of special interests.

A board without the confidence of the taxpayers means unsupported schools, without adequate funds, and without careful, economical and business like administration.

This is a matter of business and not of sentiment.

The vital principle of representative government as applied to our schools is attacked.

Do you believe in representative government and constituted authority for the government of our country and the government of our schools?

Do you want salaries fixed by those who are to draw them?

The teachers have been dissatisfied with the salary adjustment and the system of supervision. They have asked for the retirement of Superintendent Rutherford.

A SCHOOL BOARD IN DISGRACE.

Nine members of the Chicago Board of Education came under sentence of a court on June 22nd in a manner both startling and deplorable. Money fines and jail sentences were inflicted together with a scathing indictment of the offenders.

The action followed the litigation growing out of the determination of the board to deprive Dr. Charles E. Chadsey of the superintendency of the schools. The court held last November that Dr. Chadsey had been legally elected. The board, however, ousted him and elected Peter A. Mortenson instead. Contempt proceedings followed.

Those found guilty of contempt and the sentences imposed are:

William A. Bither, attorney for the board; five days in jail and \$500 fine.

Albert H. Severinghaus, vice-president of the board; three days in jail and \$300 fine.

George B. Arnold, two days in jail and \$300 fine.

Hart Hanson, three days in jail, \$300 fine.

Mrs. Frances E. Thornton, \$750 fine.

Dr. Sadie Bay Adair, \$750 fine.

Mrs. Lulu Snodgrass, \$500 fine.

Dr. George B. Klarkowski, one day in jail and \$300 fine.

James Rezny, one day in jail and \$300 fine.

James E. Croarkin, one day in jail and \$300 fine.

Besides Mr. Mortenson, his secretary, Mrs. Elsa Z. Brinsley; Ralph W. Condee, an assistant attorney; Chief of Detectives Mooney, and Detective

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SEMI-PERMANENT SCHOOLHOUSES.

The report comes from England that the Warwickshire Education Committee is contemplating the erection of a schoolhouse which is to be "semi-temporary"—as the committee terms it—and is to cost considerably less than a permanent building. The committee is to expend \$20,000 instead of \$50,000 which is the cost estimated for a permanent building of the same size. It is to last 25 years.

In the city of Minneapolis Mr. George F. Womrath and his associates in the school board office have developed a type of semi-permanent sectional schoolhouse which is in every respect, except fire-proofing, equal to a permanent building. It has hot-water heating and unit-ventilation, water supply, automatic temperature and humidity control, two toilets for each classroom, etc. It can be expanded from a nucleus of one or two rooms to twenty rooms and may include a gymnasium-auditorium. The building is portable and will easily stand 25 years.

The semi-permanent schoolhouse is well worth considering from the standpoints of educational service and economy. One of the most baffling problems of the present time is the adaptation of old schoolhouses to new types of educational activity. The old-time classroom is far too large for modern classes of thirty to forty to be comfortable or well lighted. It is wasteful for heating and ventilation and expensive to maintain in good repair. The shops of the older buildings are invariably bad. The real point is that the inflexible schoolhouse of the past generation does not fit the present-day needs and will grow worse as time goes on.

There is reason to believe, however, that with careful planning the "modern" building of today will be well adapted to conditions in twenty years from now. With the amplification of the study courses and the development of school activities there has also come the required adaptation of the schoolhouse. Thus, within the past two decades school architecture has not only met the needs of a revised and enlarged plan of schoolroom work but has made a large contribution of its own in the direction of facilitating the efforts of the schools.

It is not likely that the changes in school operations in the next decade will be as radical as they have in the past, or that school architecture of the future will be subject to the same extreme modification. Certain refinements and economies will constantly be applied, but it must also be assumed that the socalled modern schoolhouse has reached a stage of perfection that eliminates decided departure from present standards.

The suggestion of the semi-permanent schoolhouse has been made a number of times but has not received any serious attention in the United States because it has been overshadowed by other movements for perfecting school buildings. Money has been too plentiful and too easily obtained to cause school boards to look for temporary means of housing outside of "barracks". There has been a very well founded demand for fireproofing, and panic proofing for dignified and artistic design and better workmanship in schoolhouses. All these things have meant better and more lasting ma-

terials and consequently more permanent buildings of the rigid, formal type. During the past fifteen years at least the wooden schoolhouse has become practically unknown and the structures erected in urban surroundings have been of the kind which will be structurally serviceable in a hundred years hence. Since 1916 the costs have been soaring. The experience of a city like Cleveland which now pays \$14,000 per classroom where the school board paid \$6,000 in 1914, is not unusual.

The "semi-permanent" school building ap-

pears to be one possible solution of the problem—provided it can be made safe, sanitary and esthetically satisfactory as well as educationally adequate. While school boards here and there may be willing to adopt semi-permanent schoolhouses, it is doubtful whether the general public will do so. They are after all only a make-shift to tide over a period of high costs and sudden increases in population. People will accept a portable for a time but they will ultimately clamor for a "real" schoolhouse, of high grade materials and permanent construction.

THE PURCHASE OF PAINT

In line with its general policy of standardizing the construction, operation, and maintenance of school buildings, the Indianapolis Board of School Commissioners has recently adopted standard requirements for the paints and paint supplies used by the School Department.

These requirements are a decided advance in the purchase of school materials in that they reflect the best standard specifications. The requirements were drawn up by Mr. L. A. Snider, building advisor to the board of commissioners, at the suggestion of Mr. George C. Hitt, business director of the schools. The specifications are reproduced below because of their general suggestiveness for school boards who are at this time of the year purchasing paint supplies.

Specifications for Paint Supplies, Board of School Commissioners of the City of Indianapolis.

White Lead.

White Lead shall be equal to that sold under the name of "Dutch Boy", "Eagle", or "Carter's", and shall be in one hundred pound kegs.

White and Tinted Mixed Paints for Outside Use.

This paint shall be a mixture of pigment 64%; liquid 36%, with the necessary tinting colors.

Pigment: White Lead 45%; Zinc Oxide 35%; balance silica, aluminum silicate, magnesium silicate, or a mixture thereof.

Liquid: Raw linseed oil of quality specified under the heading—"Linseed Oil"—85%; balance combined drier, turpentine, volatile mineral spirits, or a mixture thereof.

Requirements: Paint shall weigh not less than fifteen (15) pounds per gallon, and shall dry within eighteen hours to a full oilgloss.

Interior Wall Paint.

This paint shall be a mixture of pigment—60%, liquid 40%, with the necessary tinting colors.

Pigment: Lithopone 90%, Zinc Oxide, 10%.

Liquid: Treated drying oil, not less than 60%, hard varnish resins not more than 5%, balance equal parts of turpentine and volatile mineral spirits.

Requirements: Untinted paint shall be a clear, permanent white, and not turn yellow or unduly discolored when excluded from light. Shall dry within twenty-four hours to a glossy film that will remain elastic. Paint shall weigh not less than fourteen pounds to the gallon.

Lithophane.

This pigment as used in the interior paint shall be of the following specifications: Zinc sulphide, minimum 26%, Zinc oxide, ZnO maximum 1.75%, water soluble salts, maximum 0.75%; moisture at 110 degrees C., maximum 0.50%; balance to make up 100%, to be of Barium Sulphate.

The above shall be of satisfactory whiteness, opacity, body, covering power, and in its resistance to darkening, it shall be of such fineness that at least 95% will pass thru a 350 mesh screen.

Dry Zinc Oxide.

The zinc oxide used in outside or inside paints shall meet the following specifications:

American process: Shall be of such fineness that 98% will pass thru a 350 mesh screen, and shall consist of not less than 98% zinc oxide; moisture at 110 degrees C. from zero to .4 per cent; SO₂ from zero to 0.2%.

French process: Shall be of such fineness that 98% will pass thru a 350 mesh screen, and consist of zinc oxide not less than 99%; sulphur in any form, not more than 0.1 per cent.

Raw Linseed Oil.

Shall be absolutely pure, well-settled oil of best quality, perfectly clear at a temperature of 60 degrees F., show a loss of not over 0.2% when

heated to 100 degrees C., and conform to the following requirements:

	Maxi- mum.	Mini- mum.
Specific gravity at 15.5°/15.5° C.	0.936	0.932
Or Specific Gravity at 25°/25° C.	0.931	0.927
Acid Number	6.0
Saponification Number	195.0	189.0
Unsaponifiable matter—per cent	1.50
Refractive index at 25° C.	1.4805	1.4790
Iodine number (Hanus)	170

Tinting Ocher.

Pigment: Shall be first quality ocher free from lead chromate, or foreign coloring matter, and shall contain 20% of iron oxide, Fe₂O₃, balance of silica and natural silicious earths and contain, of calcium compounds not more than 5%, expressed as CaO. Ground in linseed oil—in proportion of 70% pigment, 30% oil.

Requirements: The color, tone, shade and coloring power shall satisfactorily match approved sample submitted as directed, and be finely ground and free from grit, and other deleterious matter.

Lamp Black in Oil.

The pigment shall be perfectly calcined, procured from oils and contain not more than 1% of ash, and shall be ground in pure linseed oil. No Barites or other pigment shall be added, 30% pigment, 70% oil.

Burnt Umber in Oil.

The pigment shall be first quality and contain not more than 5% of calcium compounds, expressed as CaO, and shall be ground in pure linseed oil. No Barites or other pigment shall be added. Color, tone, shade and tinting power shall satisfactorily match approved sample as directed, and be finely ground and free from grit and other deleterious matter. 55% pigment, 45% oil.

Raw Sienna in Oil.

The pigment shall be first quality and contain not more than 5% of calcium compounds, expressed as CaO, and shall be ground in pure linseed oil. No Barites or other pigment shall be added. Color, tone, shade and tinting power shall satisfactorily match approved sample as directed, and be finely ground and free from grit and other deleterious matter. 60% pigment, 40% oil.

Burnt Sienna in Oil.

Specifications same as for Raw Sienna in oil.

Turpentine.

Shall be pure gum spirits of turpentine, or turpentine obtained by distillation, or by extraction with volatile solvents from pine wood. Shall be water white, free from all foreign substances and conform to the following requirements:

	Mini- mum.	Maxi- mum.
Specific gravity at 15.5°.....	0.862	0.872
Refractive index at 15.5°.....	1.468	1.478
Initial boiling point—degrees C.	150	160
90% distilled at or below °C.	170
Polymerization Residue—pct....	2
Refractive index of residue at 15.5° C.	1.5

Turpentine—Japan.

The turpentine drier must be of good quality, free from benzine, mineral oils and resin, and when thoroughly mixed with equal parts by weight of turpentine, it must dry hard and tough at 100 degrees F. on glass in a vertical position in not more than 30 minutes. This mixture should maintain a clear solution of standing at ordinary temperature for one hour.

When thoroughly mixed at ordinary temperature with 95% by weight of pure linseed oil, no

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TEACHERS' SALARIES

SAN FRANCISCO TEACHERS GET BIG PAY INCREASE.

Raises in teachers' salaries amounting to approximately \$850,000 have been agreed upon by the San Francisco Board of Education recently.

The scale of increases is in proportion to that received by teachers at the present time, rather than a flat increase such as was adopted last year. The present salaries with the proposed increases are as follows:

Elementary Schools.	Present	Proposed
Kindergartens and	Minimum	Salary.
second, third,	\$ 960	\$1,400
fourth grades.....	Maximum 1,476	1,900
fifth and sixth	Minimum 1,200	1,450
grades	Maximum 1,512	1,950
first, seventh and	Minimum 1,200	1,500
eight grades	Maximum 1,536	2,000
High school	Minimum 1,380	1,750
Assistants	2,040	2,250

The minimum and maximum salaries in the elementary schools are based on the number of years of experience, the maximum to be reached after eight years of experience. A schedule for other branches of the service will be prepared. It is noticeable that the highest increases are for the work in the lowest grades, where the teachers have to serve several years before their salaries increase to anything like a living wage. Owing to the fact that fewer teachers are applying for examinations and fewer persons are entering the Normal Schools and other schools of training for the teaching profession, it is taken as a sign that teachers will continue to decrease in numbers rather than increase.

The board made the following statement: "Careful consideration has been given all phases of this new schedule. The interest of the tax payers and of the teachers, and the difficulties confronting the supervisors in preparing the annual budget, have been seriously weighed. However, the interests of the children are supreme and have been our sole guide in the preparation of this salary schedule."

SOUTH BEND SALARY SCHEDULE.

The school board of South Bend, Ind., has adopted a salary schedule which takes into account scholarship and professional training, successful experience, and greater efficiency of the teaching corps.

It is provided that after the reappointment of teachers now in the service, and the employment of new teachers, the teaching staff shall be grouped into classes as follows:

Group one. Teachers who do not possess two years of professional training, or who are not normal graduates of schools maintaining two-year courses.

Group two. Teachers who are graduates of a standard normal school maintaining a two-year course of study and those who possess the equivalent of the same. Teachers of several years of successful experience who were in the system previous to the close of the year 1920, and who possess special merit and ability, may be advanced from Class one to Class two when they reach the maximum of the former.

Group three. Teachers who possess three years of educational training and who have had one year of successful teaching experience.

Group four. High school teachers who are graduates of a college or university recognized by the North Central Association, and who have had two years of successful experience.

The salaries for each group are:

Teachers in group one will be given a minimum of \$800, with annual increases of \$100 up to a maximum of \$1,600; teachers in group two will be given a minimum of \$1,000, with increases of \$100 up to a maximum of \$1,800; teachers in group three will be given a minimum of \$1,200, with annual increases of \$100 up to a maximum of \$2,000, and teachers of group four will be given a minimum of \$1,500, with annual increases of \$100 up to a maximum of \$2,400.

In addition to the advance for experience on the basis of efficiency, \$50 will be added to the

yearly salary for completion of five semester hours of work in a standard educational institution. Approval of the school must be obtained from the superintendent before credit will be given.

TEACHERS' SALARIES.

Substitute teachers in the elementary schools of Lynn, Mass., have been given an increase in salary to the extent of \$1,500 per year, or an average increase of about \$5 per week.

State Superintendent of Public Instruction Hines of Indiana has fixed a wage scale for high school teachers, which varies from \$6.50 for teachers to \$9 a day for superintendents of town schools.

At a meeting of the grade school board of Jerseyville, Ill., an increase of \$50 per year was given all teachers who were reemployed for the term of 1920-21. This is in addition to an increase granted a short time ago.

The board of education of Oconto, Wis., has adopted a minimum salary of \$100 per month for grade teachers. A bonus of \$50 will be paid at the end of the year to all who attend a summer session for a period of six weeks or more.

Teachers in the white high schools in Norfolk County, Va., will receive salaries ranging from \$80 to \$120 per month; white elementary teachers from \$70 to \$100, and colored teachers from \$40 to \$65. The total increase in salaries will amount to \$30,000.

The payroll of the Asheville, N. C., teachers amounts to \$15,000 a month under the present scale, but there will be an increase of 20 per cent in the fall.

Gloucester, Mass., teachers were given a flat increase in salary of \$100 which includes a \$50 increase previously promised.

Teachers in the Clarksville, Ind., schools have received an increase in salary. Those who received \$70 will receive \$90, those who received \$90 will be paid \$105, and the superintendent's salary has been increased from \$110 to \$120.

The board of education at Bucyrus, O., has raised grade teachers' salaries to a minimum of \$1,000, and high school teachers from \$1,200 to \$1,500.

As a result of the action of the Jefferson County, Kentucky, Commission, at Louisville, Ky., in fixing the school tax levy at 50 cents for the coming year in all but five school districts, teachers in county schools will receive substantial salary increases. The maximum for county teachers next year will be \$120 and the minimum will be \$75, against \$82.50 maximum and \$55 minimum last term.

Increases ranging from \$10 to \$20 a month have been given teachers in Clarksville, Ind., by the school board of that suburb. Those who received \$70 a month will receive \$90, and those who were getting \$90 will get \$105.

Salaries of instructors at the University of Kentucky at Lexington are being materially increased for the coming year, according to statement of Dr. Frank L. McVey, president. Competent instructors cannot be obtained unless better salaries are paid, Dr. McVey told the Board of Trustees.

Jersey City, N. J. In connection with the giving of salary increases to the teachers, the board has increased the salaries of four of the supervisory heads. Supt. Henry Snyder's salary has been raised to \$10,500, and the salaries of three principals have been raised from \$6,000 to \$7,000.

Shelbyville, Ind. The board has given increases of fifty per cent to elementary teachers and forty per cent to high school teachers. Automatic increases are provided each year until the maximum is reached. The schedule is as follows:

Teachers in Class One will be given a minimum of \$900, with annual increases of \$75 until a maximum of \$1,350 is reached. Teachers in Class Two will be given a minimum of \$1,000, with increases of \$75 until a maximum of \$1,450 is reached. Teachers in Class III will be given a minimum of \$1,125, with increases of \$75 until a maximum of \$2,000 is reached. Teachers of Class Four will be given a minimum of \$1,215, with increases of \$100 until a maximum of \$2,000 is reached.

Racine, Wis. The board of education has adopted a revised salary schedule providing for average increases of 25 per cent over the salaries paid last year.

Teachers in the elementary grades and kindergarten without experience will be paid \$1,100 to \$1,250; teachers with one year of experience, \$1,300; those with two years' experience, \$1,350; those with three years' experience, \$1,400; those

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Schools and School Districts.

Where it appears from the records of the county board of public instruction that a petition was filed in due form for the creation of a special tax school district, that trustees were elected and a special tax levied, and that continuously thereafter for several years without question, the district was recognized, the legality or the organization or existence of such district cannot be collaterally questioned, even the records do not show affirmatively full compliance with the law in the establishment thereof.—Gaulden v. Bellotte, 83 So. 866, Fla.

Where there has been a bona fide attempt, based on a valid petition, to create a special tax school district, followed by the exercise of the functions of such district, the legality thereof cannot be questioned, except by the state in a direct proceeding.—Gaulden v. Bellotte, 83 So. 866, Fla.

A special tax school district cannot be overlapped, altered, or amended by the establishment of another district.—Gaulden v. Bellotte, 83 So. 866, Fla.

The South Dakota laws of 1913, c. 194, did not apply to independent school districts, and did not authorize a consolidation of an independent school district with a common school district.—Isaacson v. Parker, 176 N. W. 653, S. D.

A county commissioner is not disqualified from acting on an appeal from an order of the county superintendent, changing the boundaries of school districts, by reason of the fact that the commissioner owns property affected by the change of boundaries.—State v. Board of County Commissioners of Edwards County, 188 P. 221, Kans.

An appeal from an order of the county superintendent changing the boundaries of school districts is not disposed of by the action of two of the board of county commissioners, where one of them votes to sustain the appeal and the other against it.—State v. Board of County Commissioners of Edwards County, 188 P. 221, Kans.

An appeal from an order of the county superintendent, changing the boundaries of school districts, must be heard by the board of county commissioners, and if the appeal is not determined at their first regular meeting after it is filed, it may be determined at a subsequent meeting on proper notice.—State v. Board of County Commissioners of Edwards County, 188 P. 221, Kans.

School District Government.

In a proceeding to determine title to office of county superintendent of schools for which office the North Dakota complete laws of 1913, ¶ 1122, makes the holding of a second grade professional certificate a requisite, the claim that the certificate was not legally issued involves a collateral attack thereon, since power is in superintendent of public instruction, under sections 1374, 1375, to determine qualifications for certificate, and to revoke it, if wrongfully issued.—Wendt v. Waller, 176 N. W. 930, N. D.

Under the Mississippi code of 1906, ¶ 4525 (Hemingway's code, ¶ 7345), the trustees of separate school districts have the absolute control and management of the superintendent elected by them and have the right to prescribe his duties, fix his term of office and the amount of his salary, and in what manner it shall be paid.—Ladner v. Talbert, 83 So. 748, Miss.

In view of the Mississippi code of 1906, ¶ 4525 (Hemingway's code, ¶ 7348), the only employees of a separate school district that are in any wise brought under control or supervision of the county superintendent of education are teachers and principals, and hence the superintendent of a separate school district, librarian, janitor, or other employee, need not hold a teacher's license, and they do not need any order from the county superintendent in order to be entitled to their compensation.—Ladner v. Talbert, 83 So. 748, Miss.

School District Property.

The exercise of the discretion given the board of directors of school district, under the Iowa

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—Photo by permission of Philadelphia Public Ledger.

Bryn Mawr College Girls in Training for May Day Fete

"The first requirement of education is a good animal"

—So once said a sage philosopher.

Physical exercise, recreation, and play tend to make that good animal.

Folk dancing is an ideal medium for bodily expression and a wholesome form of recreation, because it embodies all the principles of physical movement. The old stereotyped calisthenics are being replaced by mimetic exercises, which add thought, play, pantomime, and the charm of music to bodily development. The folk dance is now accepted everywhere as one of the best forms of physical education for growing boys and girls and for adults.

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Over one hundred European and American folk dances may be had on Victor Records, supervised by Elizabeth Burchenal and Cecil J. Sharp, the foremost authorities of America and England upon this subject.

The Victor is supreme in this field as in others. Procure a copy of the new revised edition of our free booklet, "A Graded

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Educational Department

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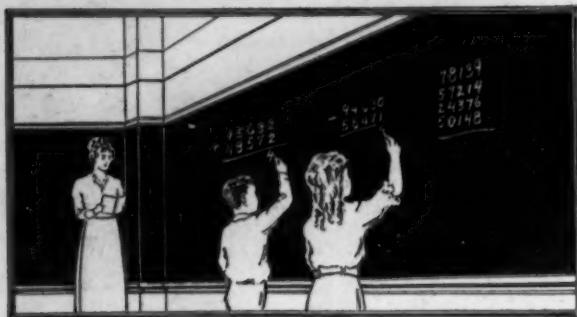
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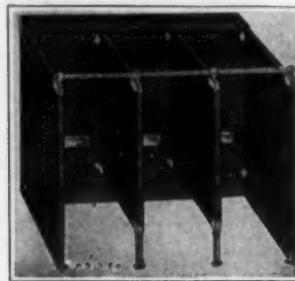
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(Concluded from Page 52)

code, § 2773, to select a site for a school building, is reviewable only on appeal to the county superintendent of schools and then to the superabsence of some showing that it has clearly exceeded its statute jurisdiction and authority, the courts will not attempt to control its action by injunction, or otherwise.—*Munn v. Independent School Dist. of Jefferson*, 176 N. W. 811, Ia.

In an action by materialman upon a bond given by a contractor building schoolhouses pursuant to Deering's general laws of 1915, it is held that claims constituting the subject of the action were not filed within 90 days after the completion of the contract; the time of completion being the date the buildings were turned over to the board of trustees and accepted as finished, tho the contractor was required 60 days later to replace certain temporary fixtures.—*Fox-Woodsum Lumber Co. v. Fidelity & Deposit Co. of Maryland*, 188 P. 70, Cal. App.

Vernon's annotated civil supplement of 1918, art. 5623a, passed by the thirty-fourth legislature (Texas laws of 1915, c. 143) and expressly made a part of the revised statutes tit. 86, c. 2, relating to liens, does not relate to a bond given under article 6394f, passed by the thirty-third legislature (laws of 1913, c. 99) Vernon's Sayles' annotated civil statutes of 1914, art. 6394f), requiring public school contractors to give bond, and hence a bond given by a building contractor under the latter section to secure the performance of a contract to erect a schoolhouse cannot be employed as a basis for recovery by a materialman under article 5623a.—*Cooper v. H. H. Hardin & Co.*, 219 S. W. 550, Tex. App.

Where a city board of education permitted a community center to use a school gymnasium and apparatus for community use, the board was liable to a boy, not a school child, who was injured by a defective springboard, which defect had been called to the attention of the principal of the school, who acted as director at such times; the boy being an invitee, and not a mere licensee.—*Kelly v. Board of Education of City of New York*, 180 N. Y. S. 796, 798, N. Y. Sup.

Where M., to whom officers of the defendant school district gave a steel tank in the basement of a school building, had the tank removed from

the basement on Friday, but placed it near the school building, and the plaintiff on Monday following, while he and other school boys were playing upon and rolling tank, either fell or was pushed from the tank and injured, the school district is liable; Washington laws of 1917, p. 332, exonerating school districts from liability for an accident which occurs upon any athletic apparatus or manual training equipment not applying.—*Stovall v. Toppenish School Dist. No. 49*, 188 P. 12, Wash.

Where the officers of a defendant school district gave M., a steel tank in the basement of a school building in consideration that he remove it from the school premises, but tank, tho removed from the basement on Friday, was still on the school grounds the following Monday, when the plaintiff, while he and other boys were playing upon and rolling tank, fell from the tank and was injured, the school district cannot escape liability on the ground that it did not have sufficient notice.—*Stovall v. Toppenish School Dist. No. 49*, 188 P. 12, Wash.

School District Taxation.

Under the Oklahoma acts of Congress of July 30, 1886, § 4 (U. S. complete statutes, § 3483), a school district of a territory cannot become indebted in any manner or for any purpose to any amount which in the aggregate, including existing indebtedness, exceeds four per centum of the value of the taxable property within such school district, to be ascertained by the last assessment for territorial and county taxes previous to the incurring of such indebtedness.—*Van Arsdale Osborne Brokerage Co. v. School Dist. No. 16, Comanche County*, 188 P. 333, Okla.

The provision of Kirby's Digest of Arkansas, § 1498, that the names of those members of the county court voting in the affirmative and of those voting in the negative on all propositions to levy a tax, etc., shall be entered on the record is mandatory, and applied to levy of school taxes.—*Blakemore v. Brown*, 219 S. W. 311, Ark.

Where the record of the county court recited that a quorum of the justices was present, naming them, further recital of a levy of school taxes, in which all the justices concurred, was a sufficient compliance with Kirby's Digest, § 1498, re-

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quiring the names of those members voting on propositions to levy taxes, etc., to be entered on record; for the word "concurred" necessarily implied consent evidenced in some overt way, and not a mere silent acquiescence or submission, so that the word "vote" would not carry with it any stronger implication of some affirmative act (citing words and phrases) concur.—*Blakemore v. Brown*, 219 S. W. 311, Ark.

Where a levy for school taxes exceeded the amount voted, the levy is void.—*Blakemore v. Brown*, 219 S. W. 311, Ark.

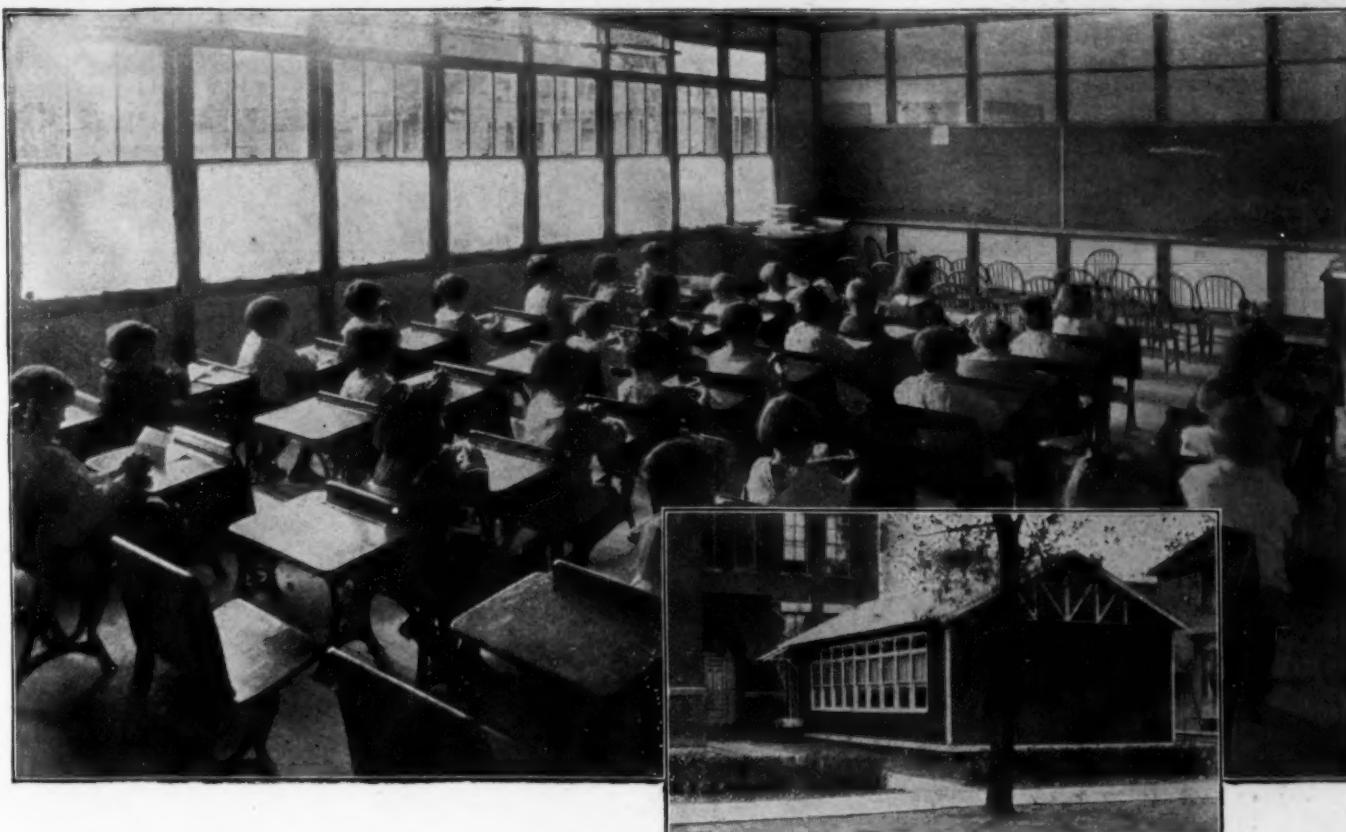
A purported consolidation of independent and common school districts under the South Dakota laws of 1913, c. 194, was neither a *de jure* nor a *de facto* corporation, and hence the remedy by quo warranto was not exclusive, and taxpayers who had paid taxes under protest could recover the same in an ordinary action.—*Isaacson v. Parker*, 176 N. W. 653, Ark.

Teachers.

A collateral attack on a second grade professional certificate required by the North Dakota laws of 1913, § 1122, as a qualification for the office of county superintendent of schools, is not permissible.—*Wandt v. Waller*, 176 N. W. 930, N. D.

Under Kirby's Digest, § 7616, forbidding employment of teacher related to a member of the school board, except on petition of patrons of school, a petition by two-thirds of the patrons for employment of the plaintiff, a first cousin of one school director, to teach summer school for 1917, or "any succeeding school," did not authorize employment of the plaintiff for the summer of 1918, and the fall and winter of 1918-19.—*School Dist. No 107 v. Perrymore*, 219 S. W. 316, Ark.

Where a school district employed a teacher thru only two of its three directors, but the third subsequently signed the contract, and the teacher, moreover, was paid part of her salary, the directors not only assenting to the fact that she had a valid contract, but insisting that she perform it, the contract was duly ratified, and tho there was no meeting of the board of directors prior to its making, became binding.—*School Dist. No. 36 of Hot Springs County v. Gardner*, 219 S. W. 11, Ark.



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The "Empire" Chair Desk is made in six sizes to fit the various grades and has five adjustments so that each pupil may be individually fitted.

The adjustments are strong but very simple in construction, easy to operate, nothing to get out of order—no wrench needed.

Thousands of these desks are in use throughout the country. If you will write us we shall be pleased to give you the names of the schools in your vicinity where the "Empire" Movable and Adjustable Chair Desks are in use.

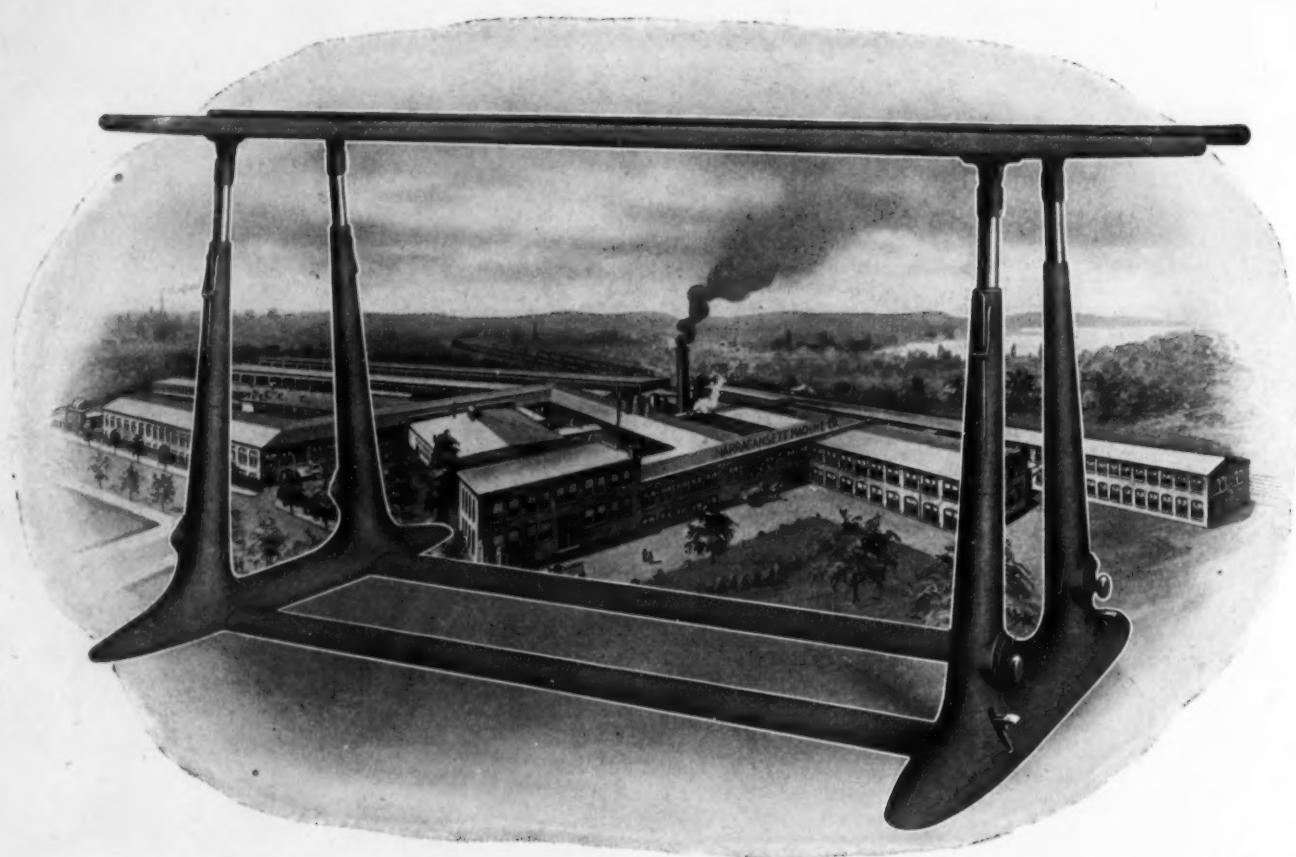
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40a

FOR BUSY SUPERINTENDENTS.

(Concluded from Page 50)

these subjects, a pupil may be excused from these subjects, as long as the faculty considers that he is keeping up to the *standard* requirements in these subjects.

High school pupils of the normal and rapid (express) groups are in the same classes with the same teachers; the former group are carrying four major subjects while the latter group are carrying five major subjects. Each group will be expected to *attain* and *hold* the *standards* required for the minor subjects mentioned in the paragraph above.

The advantages of the Dover plan as the writer sees them are:

1. Offers an incentive for desirable habits of study and conduct.
2. The elementary grades are more *flexible* than *has been* possible heretofore.
3. A capable and determined child of good health may complete grades in five years.
4. A capable and determined child of good health may complete high school in five years.
5. A capable and determined child of good health may complete school in ten years.
6. May help solve the "labor problem" by permitting a child to finish school earlier.
7. Plan provides to reward *ability* and *determined continuous effort*.
8. Plan provides for segregating children according to *capacities*.

NEWS FOR SUPERINTENDENTS.

At a meeting of the board of education of Rutland, Vt., a recommendation was approved providing for the consolidation of the four ninth grades.

A go-to-school day was recently observed in the schools of North Adams, Mass. Parents of pupils visited the schools and inspected the work

done. There were exhibitions in both grade and high school.

A statewide mental survey of high school seniors in Indiana has been completed by Prof. W. F. Book, head of the psychological department of Indiana University. The survey had for its purpose the development of reliable tests for the selection of specially able students. Seniors in 320 high schools, comprising 6,000 students, were examined.

It is believed that graduates of the high schools who possess superior native mental endowments should be located, encouraged and assisted to continue their education beyond the high school. A reliable intelligence rating will greatly assist the college faculties in directing and supervising the educational work of freshmen students.

The study sought to ascertain the average of intelligence among high school seniors, the variations among the students, and the relative frequency with which these grades of intelligence were found. The study revealed that the group expecting to attend college ranks above that which will not attend, that 25 per cent of the students with the highest grade of intelligence do not consider college entrance, and that 65 per cent of those with low grades definitely plan to attend college. For every level or grade of intelligence, the boys rank higher than the girls.

Chelmsford, Mass. The school board has issued a report on the survey of the school plant. The survey was followed with a development program providing for new buildings, purchase of sites, and the addition of a third truck for transportation purposes.

The Kentucky Education Commission recently appointed by Governor Morrow, will ask the General Education Board of New York to make the school survey of the State authorized under the law. It will cost approximately \$10,000.

In his annual report to curators of Transylvania College, Lexington, Ky., President R. H. Grossfield stated that the high cost of living and the abnormal and unprecedented demands for physical labor have produced an especially trying situation for the 1920 High School graduate. Financially, it is more difficult to obtain a college

education and the demand for labor at high wages makes higher education seem less necessary than in former years.

A vacation school conducted by the city school system of Norfolk, Va., has been opened and will continue for eight weeks. Tuition will be free to pupils recommended by the principals. Classes will be held from 8:30 A. M. to 12:30 P. M., and there will be schools for both white and colored pupils.

A vacation high school has been opened at the High School of Commerce building at Worcester, Mass., to be conducted for about six weeks. The object is to help those who have fallen behind in their studies and to allow those who reach a passing grade to advance with their regular classes in fall. Pupils who have not failed in their regular classes, but who will profit by the drill, are also allowed to take the course.

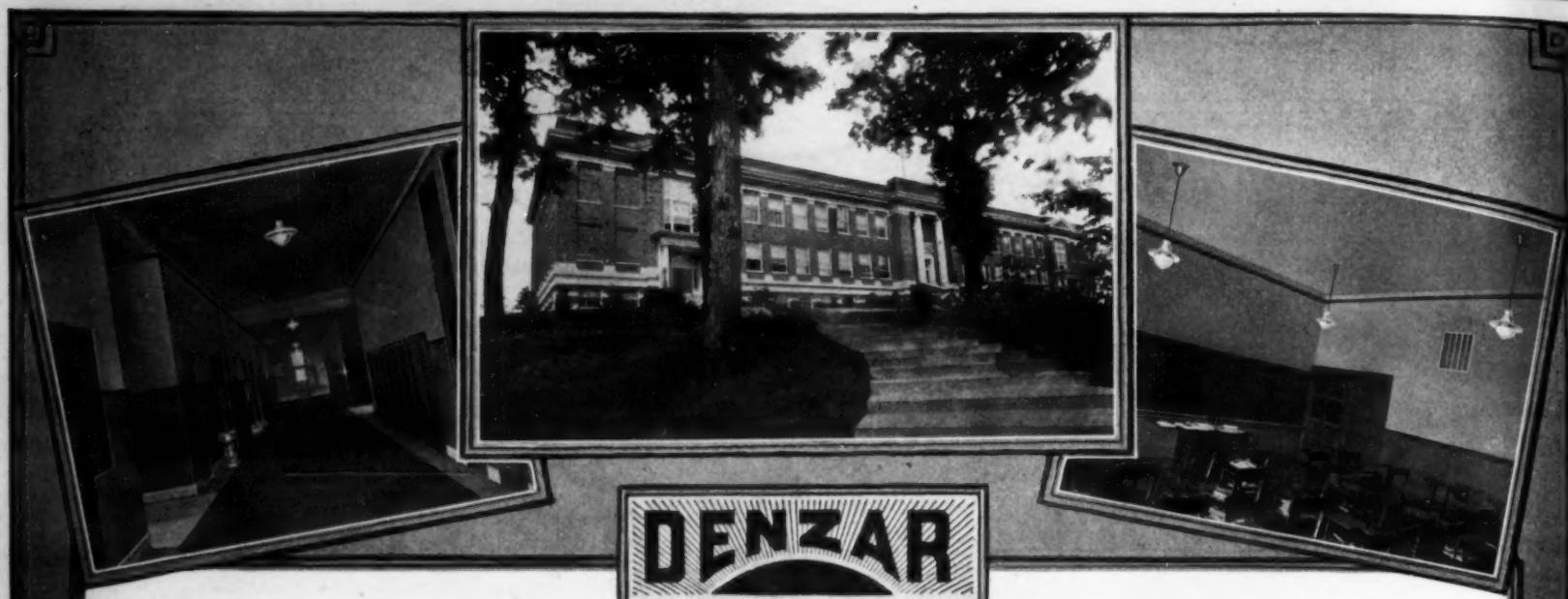
The school board of Petersburg, Va., has opened a summer school for various classes. Those who failed will be able to pursue their studies and be promoted to the next grade at the next session. Those who were promoted but are weak in certain studies may better qualify themselves for the next term. Those who passed with a high average will be able to make another grade during the summer.

Owing to the success of the summer school last year, the Pawtucket, R. I., school board has decided to continue the classes this year during the months of July and August.

A class of 25 teachers has been organized at Louisville, Ky., to receive training for the correction of speech defects. Classes for both white and colored children will be established in September for the correction of speech defects.

A census of the school population of Alton, Ill., has been made under the direction of the superintendent of schools. Under the system now in use in compiling the census, it has not been necessary this year for enumerators to call at the homes of the pupils.

Last year all families were card indexed, and this year it was necessary simply to learn what families left the city and what children left school. Deducting these and adding the families



DENZAR
The Unit of Day Brightness

Speaking recently before a gathering of illuminating engineers, state and city school authorities and teachers, F. C. Caldwell, professor of electrical engineering in the Ohio State University and chairman of the committee on education of the Illuminating Engineers' Society of the United States, said that more school lighting systems were bad because of glare than because of insufficiency of light. The growing popularity of Denzar as an ideal lighting unit for class rooms and assembly halls is largely due to its soft, sunlike radiance free from glare and harsh shadows.

Many of our modern high schools have, during the last few years, been equipped with Denzar. The views above were taken in the West Side High School, Evansville, Ind., which is equipped throughout with Denzars. If you wish to pay greater attention to the lighting effects in school buildings, as Prof. Caldwell advises, write for the Denzar catalog and get posted on its advantages.

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which have moved into the city, the final figures have been obtained. The school officials keep in close touch with the movement of families by the entrance and withdrawal of pupils from school.

Worcester, Mass. The pupils in the public schools were mobilized in June in an effort to check up the federal census enumeration. The children gathered information which was presented at the mayor's office for revision of the census figures.

Atlanta, Ga. The council of the parent-teachers' association has adopted resolutions favoring a plan agitated by the board of education for the separation of the schools from the municipal government.

The dual system of control in the schools of Knox County, Tenn., passed out of existence in July with the passage of a new law. The act eliminates the high school board and creates a county board of five members. The present board members will be automatically retired from office and an entire new board will go into office.

State Supt. A. O. Thomas of Maine, in a recent statement, has declared that altho the figures of Dr. Leonard P. Ayres of the Sage Foundation placing the state 35th in efficiency among the states are indisputable, they give only potentialities, and cannot be taken as determining absolutely the question as to whether or not a state is solving its school problem most advantageously. Mr. Thomas declared there must always be some question as to whether the data is of vital and relevant character.

There is also some difference of opinion, according to Mr. Thomas, as to what constitutes a proper measure of efficiency. It cannot be denied that each item involved has its bearing and is of relative importance. If efficiency is the securing of the highest and most satisfactory results for the least expenditure of time, money and materials, then it is granted that since Maine in 1918 paid the lowest salaries to the teachers of any northern state, her educational system suffers, and that since Maine has not paid out so much money for school buildings, another sure sign of wanling efficiency is revealed.

It is pointed out that the west some fifty years ago had no school system. Their rise has necessarily been rapid while New England's educational foundation is of more than a century. The rapid rise of western states has brought changes in the standing of the states and shows up to the advantage of the newer state, and to the seeming disadvantage of the older. While Maine has suffered a decline in relative position it is held that she has really advanced in efficiency and in desirable school conditions.

Lowell, Mass. Arrangements have been made for the establishment of a continuation school for employed minors. The board plans to use a number of high school rooms for the purpose. Classes will be conducted in the afternoon.

Michigan school districts, with a population of 5,000 or more, have taken steps toward the establishment of continuation schools in compliance with the state law. Employed boys and girls up to 18 years of age, who have not graduated from high school, must attend school eight hours weekly.

The school board of Boston in view of the uncertainty of the coal situation, has ordered that coal must be purchased in such quantities, of such kinds, and at such times as may seem desirable for the best interests of the schools. The total annual supply of coal for the schools is about 34,000 tons.

A continuation school will be opened in the industrial school at Lawrence, Mass. About 1,650 pupils between 14 and 16 years will be in attendance.

Following failure of more than 1,000 applicants for teachers' certificates to pass the examinations, State Superintendent George Colvin has sent out questionnaires to all county superintendents of Kentucky in an effort to prevent a teacher shortage this year. The questionnaire asked how many teachers will be needed, how many are under contract, what counties are short and what counties have a surplus of teachers.

There is a total enrollment of 13,497 pupils in the Tampa, Fla., public and private schools, ac-

cording to a recent census taken. There are 1,993 pupils in the colored schools.

A county normal school where high school graduates can secure one year's training free of charge will be established in Marion, O. This was made possible by a vote taken by the board of education accepting a proposition submitted by the state department of public instruction.

Milwaukee, Wis. The board of school directors has authorized Supt. M. C. Potter to organize a teachers' council. In its resolutions the board requires that the council report primarily to the superintendent and consult with him and that subsequently the results of such consultations, the matters of school policy, discipline, etc., shall be reported to the board whenever the council so requests.

Superintendent Clarence H. Dempsey of Haverhill, Mass., has suggested a double program plan for the lower grades to relieve the congested condition in the Currier and Tilton district until the new addition has been completed. The plan will call for two classes of 30 children each, to one room, one class to be in session from 8:30 to 11:00 o'clock and the other from 9:15 until 11:45, each class to have a separate teacher. This will bring the 60 children together from 9:15 to 11:00 A. M. for a special program to include music, drawing, writing, physical exercise and recess, and three-fourths of an hour separate time for each group. A corresponding program will be arranged for the afternoon.

At the taking of the school census at Norfolk, Va., this year it was found that there are 4,683 more pupils between the ages of six and twenty than there were five years ago, and that 24,483 white and colored children will attend school next year. To make room for this large enrollment the school board has been busy putting up several additions and two new junior high schools and it is expected the entire building program will be completed within the near future. It is estimated that \$650,000 will be expended by the school board for building work to be done within the next few years.



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Today's the First of May (Swedish)	Prince's Band	10-inch \$1.00
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Miss McLeod's Reel (American)	Prince's Band	10-inch \$1.00
Chicken Reel (American Country Dance)	Prince's Band	A-3077
Old Zip Coon (American Dance)	Prince's Band	10-inch \$1.00
Hansel and Gretel (Singing Game)	Prince's Band	A-3080
Sandal Polka-Swiss May Dance	Prince's Band	10-inch \$1.00

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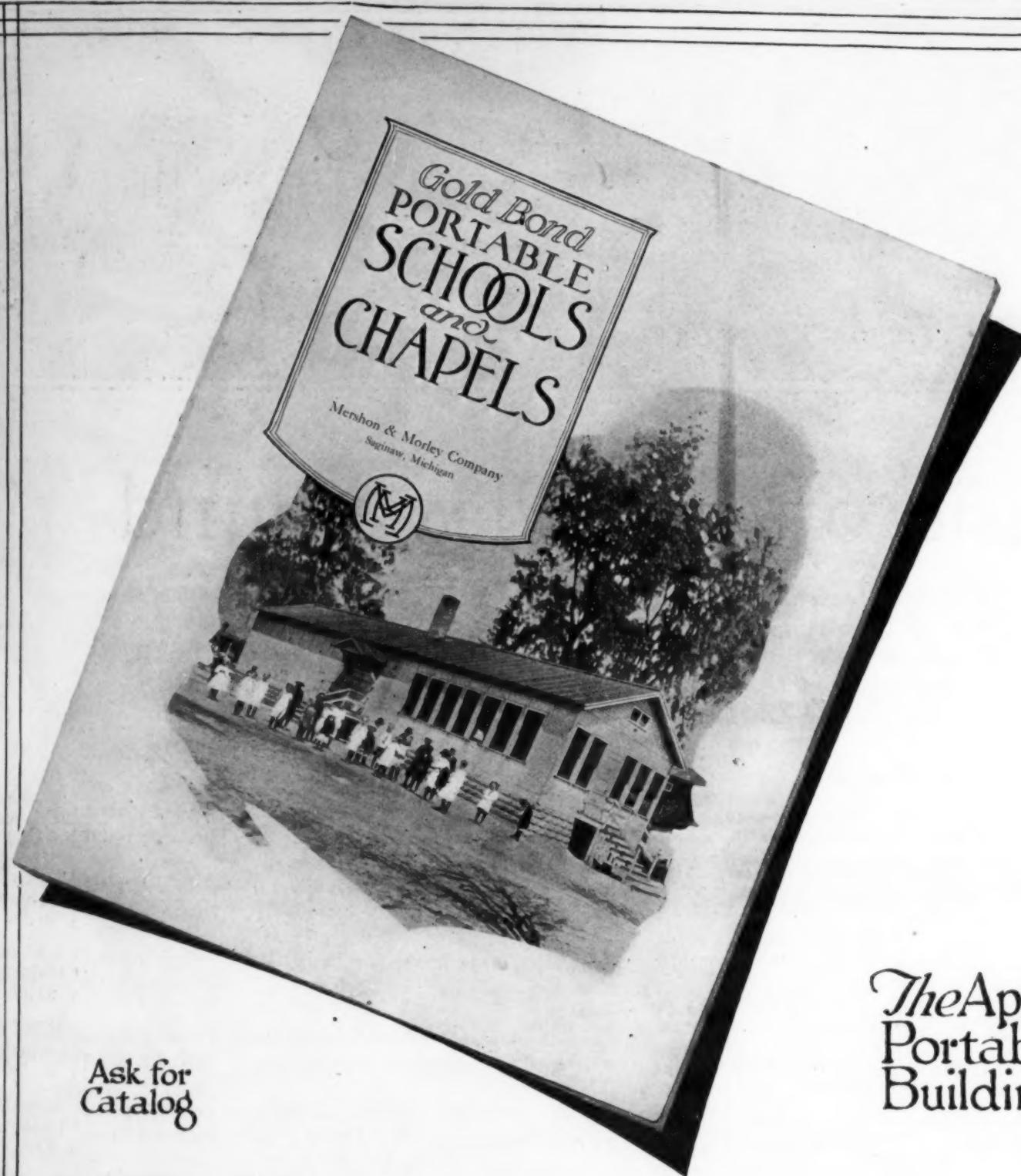
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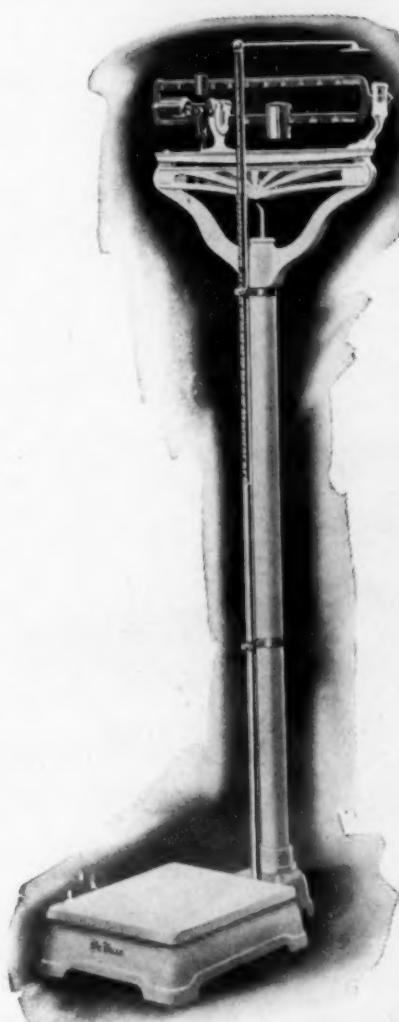
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SCHOOL BOARD NEWS.

(Concluded from Page 50)

Sergeants Hugo Groat, Eugene McCassey, and George Hans were acquitted.

"Law and order never will prevail in this community while persons of standing and authority, like these respondents, in concert of action treat with open contempt and disobedience the mandate of the court," said Judge Scanlan.

"The guilty conspirators in the case have succeeded in their shameless and lawless design to prevent Dr. Chadsey from holding the office to which he was entitled under the law, and all that this court can do now is to see that the guilty ones shall not go unwhipped of justice."

The defendants were released on bonds pending an appeal to the higher courts.

SCHOOL BOARD NEWS NOTES.

That pupils in San Francisco who thru illness or other causes fell behind in their studies may have an opportunity to go ahead with their classes at the beginning of the next school year (August 2), vacation schools have been established. These vacation schools opened June 21 and closed July 23. They were established in the John Sweet, Fairmount, Hancock, Franklin, Monroe and Lagune Honda schools.

With an enrollment of 2384 students the six "vacation schools" are well under way. So great was the request for admission that the board of education assigned twenty additional teachers to the staff. Lack of funds limits the number of students this year to 3,000.

Five summer schools operated in Louisville by the Board of Education were opened in July to an attendance of 989. This means that one student out of Louisville's 31,000 public school children is attending summer school.

Superintendent Winslow of the Providence, R. I., schools has submitted a report to the school committee in which he states that it will be necessary to have at least 60 part-time classes and that outside annexes must care for the high school overflow in order to accommodate 35,000 pupils.

Buffalo, N. Y. The city council has recently taken steps that will pave the way for an in-

vestigation of the business methods of the board of education. At a meeting held recently the council adopted a report by the finance commissioner of the city in which it was charged that no satisfactory explanations had been made concerning certain business transactions of the board. There was no charge of dishonesty or of misappropriation of funds but simply irregularity and illegality in the purchase of furniture, the erection of garages, building work and the employment of architects.

Louisville, Ky. At a recent meeting of the board of education the following resolution was offered and passed: "We recommend that the board of education erect in the Louisville Male high school and in the Du Pont Manual Training high school a suitable tablet in memory of both graduates and undergraduates of said schools who gave their lives in the recent war."

Lexington, Ky. The state department of public instruction in cooperation with the University of Kentucky, Lake Division, American Red Cross, has organized a school for attendance officers, to be held at the University of Lexington during the first two weeks in August. An intensive study of school attendance problems from the practical and social service standpoints will be made and the object of the course will be to analyze Kentucky's problems and discuss the most efficient methods of handling them.

The legal phases of the problem will be carefully studied, and there will also be discussions relative to the best methods of cooperation with local agencies and county and state officers; also lectures on public health, medical inspection, school sanitation, good roads, dependency, delinquency, etc. The school will be conducted by leaders in the educational field and special lectures will be given by men of national prominence on various problems of school attendance.

The Supreme Court of Gloucester, Mass., has decided against the teachers in their fight to recover the sum of \$246.42 which was deducted from their salaries during the influenza epidemic in 1919. The court declares the plaintiffs had no valid claim because of failure on their part to obtain from the school committee a certificate of their qualifications and the filing of a copy

of same either with the auditor or the treasurer of the city of Gloucester, as required by chapter 42, section 29, of the revised laws.

According to a petition filed in common pleas court by Law Director R. G. Curren of Lakewood, O., the law does not require a superintendent of schools to prefer charges against teachers or grant them hearings before refusing them reappointment. This practically ends the fight made by eleven Lakewood high school teachers to restrain the board of education from hiring new teachers in their places until after final disposition of their suit in which they allege Superintendent Chas. P. Lynch ousted them without charges or hearing.

Conscientious scruples of parents against "folk dances" in the schools will not release their children from the duty of participation according to a decision at Sacramento by Judge Peter J. Shields of the Superior Court. Two children of C. C. Hardwick were suspended from the Fruitridge District School when they refused by the parents' instructions, to take their places in a class in folk dancing. The parents sued to have the children reinstated. The Court held that the School Board was within its rights and that the objectors could not create for themselves an individual religion and hold the school authorities to their belief.

The school board of Watertown, South Dakota, has engaged in a novel innovation in that it has insured its teachers against accidents and illness. The policy covers 74 instructors and will cost \$1,460 for the year.

Under the plan the teacher who is ill will receive full pay during which time the company pays the board at the rate of \$25 a week. In case of accidental death the board receives the sum of \$1,000. It is claimed that this is the first step of the kind undertaken by school boards.

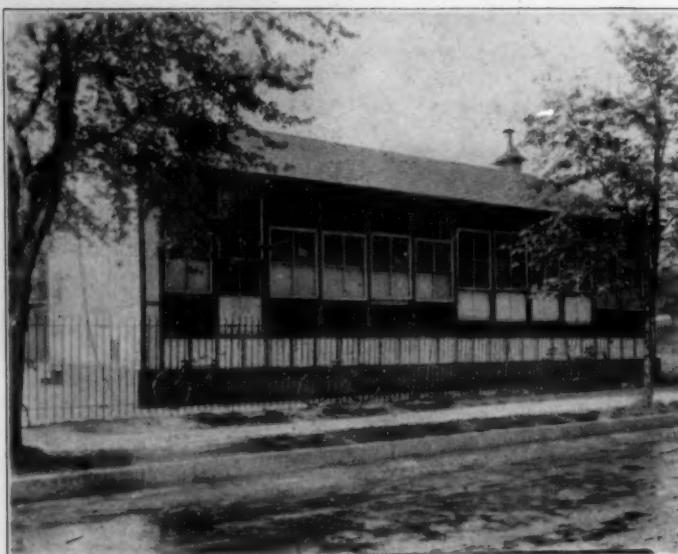
Dr. W. M. Haller has been reelected secretary of the board at Blair, Neb.

Mr. W. A. Pillans has been appointed business manager of the board of education at Lorain, O.

The school board of Atlanta, Ga., has adopted a program of building activities for the next year.

Advantages of Asbesto-Crete School Houses

Illustration below shows one of the Asbesto-Crete School Houses.



Now, when school houses everywhere are becoming over-crowded and additional buildings are needed, the Asbesto-Crete type of school house is much in demand.

Asbesto-Crete Buildings

We call attention particularly to the Asbesto-Crete two room school house which is much cheaper than an ordinary brick or stone structure, requires no repairs and is absolutely fire-proof.

The plans have been approved by many state boards and city authorities.

Ambler Asbestos building products are specified in all Asbesto-Crete buildings.

Write for further information

Asbesto-Crete Buildings Company

1927 Market Street, Philadelphia

A new law increasing the salaries of public school teachers of New York State carries an appropriation of \$20,550,000 and provides a direct tax of 1.5 mills on real property to yield that amount. Increases in New York City will average \$600; in other parts of the state from \$250 to \$550.

School Commissioner Payson Smith reports that there is no actual shortage of teachers in the state of Massachusetts.

At Terre Haute, Ind., the Teachers Federation employed newspaper advertising space in presenting their protest against the school board's salary schedule for the next year.

The teachers of Indianapolis, Ind., have objected to the bonus system. They ask for an outright salary increase and the elimination of the bonus.

At Newport, Ky., thirty-three teachers went on a strike demanding a flat increase of \$300. The present maximum is \$96.25 a month.

In cities of 100,000 and over the teachers of Illinois come under the civil service law of that state. This law provides that: "No teacher who has been appointed by the Board of Education shall (after serving the probationary period of three years) be removed except for cause, and then only by a vote of not less than a majority of all the members upon written charges presented by the Superintendent, to be heard by the Board or a duly authorized committee of the same, after 30 days' notice, with copy of the charges served upon the accused, who shall have the privilege of being present together with counsel, offering evidence and making defense thereof. At the request of any party such hearing shall be public."

Following a conference between the mayor and school officials of Malden, Mass., a temporary curtailment in the school system has been announced, due to a lack of funds. The force of school nurses is to be reduced to one-half; no repairs to school buildings; the abolishment of one, and a reduction of courses at two evening schools; abolition of assistants to principals, and a discontinuance of physical training for girls at Malden High School. It is believed a saving of \$4,000 will be effected.

The school board at New Haven, Conn., has decided to discontinue hired supervision at high school dances, leaving it in the hands of the teachers.

According to a report compiled by the working certificate bureau of the Chicago board of education, 30,000 children of school age are now employed in industries.

The tuition of the Rockville, Conn., High School has been increased \$15, making it \$80 for out-of-town pupils. The graded school tuition has been increased from \$20 to \$30. The high school has an enrollment of 275 pupils and about 125 come from out-of-town.

Windham, Conn. The tuition for non-resident high school students has been raised from \$70 to \$80. The increase affects more than two hundred pupils.

Everett, Wash. The board has adopted a pay schedule for janitors which will reach a total of \$5,900 for the year. Under the schedule, the increases vary from \$20 to \$40 a month and the salaries range from \$120 to \$190.

Danville, Ill. The combined position of superintendent of manual training and business manager has been divided. Capt. L. A. Tugle will retain his former position as head of the manual training department and a new official will carry out the duties of business manager.

Alton, Ill. The board of education, thru its supply commissioner, has become its own agent for the selling of textbooks to students. Books will be sold at cost making it possible to effect a small saving. The real saving, it is estimated, will be in the matter of time as students will have books and will be saved the trouble of going to the stores.

Madisonville, Ky., must discard its complicated white and common negro school districts and reorganize its system as a fourth-class city with a board of six members in control of both white and negro schools, according to a ruling of Chief Justice Carroll. Heretofore, the negro schools have been under the County Board.

St. Paul, Minn. Rev. L. R. S. Ferguson has become Commissioner of Education for the city to succeed Mr. Albert Wunderlich. Dr. Ferguson is rector of an Episcopal church in the city and is

the first clergy elected in the county to a public office. He was senior chaplain of the American forces in France and was in the service during practically all of the war. He has been interested for many years in education and is peculiarly well fitted by his natural inclination and cooperation to hold the office of Commissioner of Schools. Very soon after assuming the duties of office, Commissioner Ferguson appointed Mr. S. O. Hartwell to succeed himself as superintendent of schools and Mr. K. F. Dreher to succeed himself as Deputy Commissioner in charge of the business and building affairs of the schools.

The school board of Oklahoma City, Okla., has joined with other cities of the state in a movement to obtain a constitutional amendment for making school districts self-supporting. It is planned to increase the excess tax limit from ten to twenty mills, which added to the regular five-mill levy, will create a maximum of 25 mills.

Hannibal, Mo. The board has adopted a policy under which the first four grades will be operated on a half-time schedule and the four upper grades on full time. The change was made necessary because of a lack of funds and a shortage of teachers.

Requests of representatives of ten or twelve book companies for permission to make increases in the contract prices of public school textbooks because of the increased cost of production were refused by the Alabama state board of education.

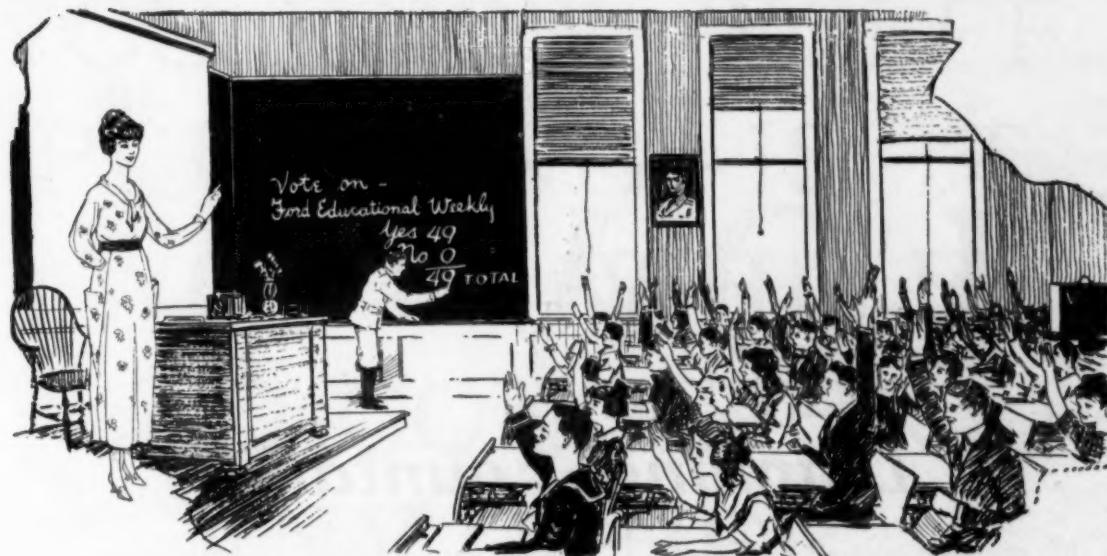
The Colorado Supreme Court has decided that members of school boards are not subject to recall under the provisions of the state constitution.

NEWS OF SCHOOL BOARD OFFICIALS.

Mrs. W. A. Patton has been reelected a member of the school board of Bluffton, Ind., for a second term. Mrs. Patton is the only woman on the board.

John Drescher, 74 years old, member of the old Louisville School Board for sixteen years, died at his home here last week, after being confined to his home for eighteen months.

Mr. Charles F. Middlebrook has been elected secretary of the board of education at Binghamton, N. Y., to succeed Mr. F. H. Smith.



The Vote on the
Ford Educational Weekly
—Always “Unanimous”!

***Superintendents and Members
of School Boards:***

Do you want your teachers to teach pupils who are really eager to learn? Do you want those pupils to become vitally interested in school work and the subjects taught? Do you want your teachers to do in one day better and more work than many now do in a week?

These results are all possible!

If you want these results—promptly get acquainted with the Ford Educational Weekly. Secure for your School a high-grade projector (the machine which throws a motion-picture onto the screen). Subscribe for the Ford Educational Weekly motion-picture films—they are the most practical,

interesting and generally instructive films in the world. There is a new one each week. The ***Goldwyn Distributing Corporation*** distributes them from 22 leading cities.

When you have Ford Weekly motion-pictures in your School you will note your teachers have a new joy in their work. They will be experiencing the reaction of giving ***so much to so many in so short a time.***

If you fill out the coupon we shall gladly reply. Don't confine your inquiries to the Ford Educational Weekly, but write and ask us with regard to any branch of the motion-picture art on which you wish information.



If your school has no projector, or a poor one, we will assist you to get in touch with the best projector made.

Fitzpatrick & McElroy, 202 South State St., Chicago

COUPON

Fitzpatrick & McElroy, 202 S. State St., Chicago, Ill., Dept. D-4
 Yes. No. Is your School now a subscriber to the Ford Educational Weekly?
 Yes. No. Have you ever seen a Ford Educational Weekly film?
 Yes. No. May we lend you one gratis to throw on your screen?
 Yes. No. Has your School an adequate projector?

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Teacher in _____ School _____

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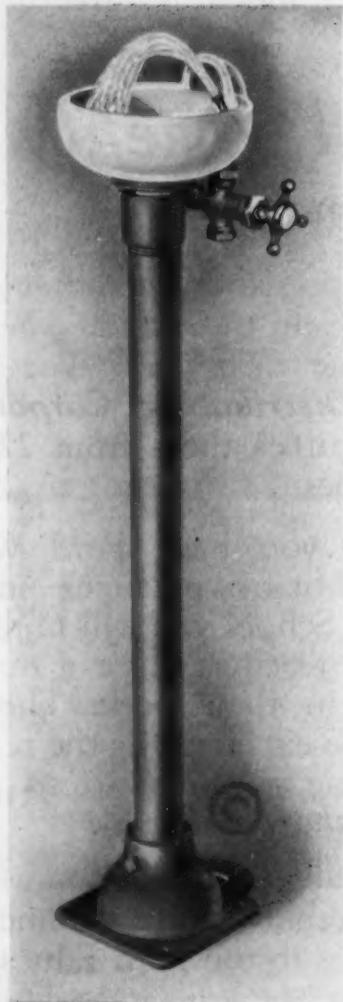
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Drinking Fountains



The Clow Hygeia Stream fountain is the safest type of drinking fountain known. No germ can remain suspended in the stream of the Clow Hygeia Stream fountain, because the angle at which the jet is projected permits no water to fall back toward the orifice. Furthermore, the orifice is protected by a hood which prevents direct contact with it.

This is but one of the many fixtures that Clow has improved for school use. Your contractor or architect will tell you about them.

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General Offices - 255 N. Hoyne Ave.

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CHICAGO

THE PURCHASE OF PAINT.

(Continued from Page 51)

curdling shall result or any marked separation on standing, and when this mixture is flowed over glass in a vertical position at 100 degrees F. the coating shall dry throughout, hard and tough, in not more than 2½ hours.

Oxide of Iron in Oil.

The pigment shall be finely ground natural iron oxide, and silicious earth pigment, with requisite tinting material. The total pigment must contain not less than 25% ferric oxide, Fe_2O_3 . Liquid shall be pure raw linseed oil.

Flat White.

Paint shall be composed of pigment 70%, liquid 30%.

Pigment: Lithopone 70%, zinc oxide 10%, balance white mineral pigment.

Liquid: Treated oils, varnishes, or a mixture thereof, and turpentine, mineral spirits, or a mixture, thereof, in such proportions as to insure not less than 25% of non-volatiles.

Requirement: Paint shall weigh not less than 14½ pounds per gallon, be finely ground, washable, flow and bide well; flat white free from laps and brush marks, and leave a coating suitable for refinishing.

White Enamel.

The pigment shall be pure French process zinc oxide, and liquid shall be of high grade varnish resins or treated drying oils, and turpentine, volatile mineral spirits, or a mixture thereof.

Requirements: Enamel shall be white and dry with a high luster to a tough elastic film within twelve hours. When brushed on to a panel of clean bright tin, and allowed to dry for 48 hours, it shall withstand bending over a rod ½" in diameter, without showing cracking, or flaking at the point of bending.

Benzine.

Shall be a hydro-carbon distillate, water white, neutral, clear, and cause no darkening when mixed with basic white lead or other similar pigments. Residue shall not exceed 0.03 grams when 10 cc. are placed in a crystallizing

dish 2½" in diameter, and permitted to remain on a boiling steam bath for 2½ hours. Flash point shall not be less than 29 degrees C. in closed tester. Initial boiling point shall be not less than 129 degrees C., and 97% shall distil below 243 degrees C., when tested according to the latest method of the American Society for Testing Materials.

Turpentine Asphaltum.

Shall be composed of Gilsonite gum, compounded with turpentine, linseed oil and volatile mineral spirits, or a mixture thereof. Shall be free from sediment or dirt, and set to touch in two hours, and dry to a hard black lustrous film in fifteen hours.

Putty.

Pigment to be pure Whiting free from grit or alkali, ground with 75% linseed oil, and 25% putty oil.

Graphite in Oil.

Pigment shall be a natural or artificial graphite pigment containing at least 60% graphite carbon, balance, iron oxide, silica or silicious earth pigments, ground in pure raw linseed oil.

Red Lead in Oil.

The proportions shall be pigment 82%, liquid 18%. The pigment portion shall consist of red lead not less than 65%, and the remainder shall be silicious matter, such as aluminum silicate, magnesium silicate, silica, or a mixture thereof. The red lead shall contain not less than 85% true red lead Pb_3O_4 —the remainder to be litharge, PbO . The liquid portion shall consist of raw linseed oil.

The semi-paste paint shall weigh not less than 22 pounds per gallon. When mixed with the thinning mixture in the proportion of 2 volumes of semi-paste to 1 volume of Standard thinning mixture, the resulting mixture applied to a smooth metal surface shall dry in ten hours with an oil gloss.

Aluminum Bronze.

Shall not be less than 98% pure powdered aluminum, free from sulphur, arsenic, and antimony—shall show only traces of iron, silica, carbon, or other impurities.

White and Orange Shellac.

Shall consist of four pounds of gum shellac cut in one gallon of clear denatured alcohol, which shall be No. 1 Internal Revenue department standard (100 gallons of grain alcohol and 5 gallons of approved wood alcohol). The shellac used shall be a high grade bleached, or orange shellac, as specified, shall be free from rosin, or other adulterants; when treated with hot 95% alcohol, will not show a residue of insoluble matter exceeding 1.75.

White and Orange Shellac Substitute.

Shall be composed of pure Manila gums, cut four pounds in special denatured alcohol, and shall be free from Rosin, dirt, or other deleterious substances, and should dry well and work free under the brush.

Ammonia.

Shall be U. S. P. stronger ammonia.

Denatured Alcohol.

Shall be Internal Revenue standard for industrial purposes thinned with wood alcohol, and benzine, in accordance with the U. S. Internal Revenue specifications.

Benzol.

Shall be C. P. benzol.

Paraffin Wax.

Shall be Standard Oil Company's standard.

Floor Wax.

Shall be a standard brand and bidders shall name brand of wax in their bid.

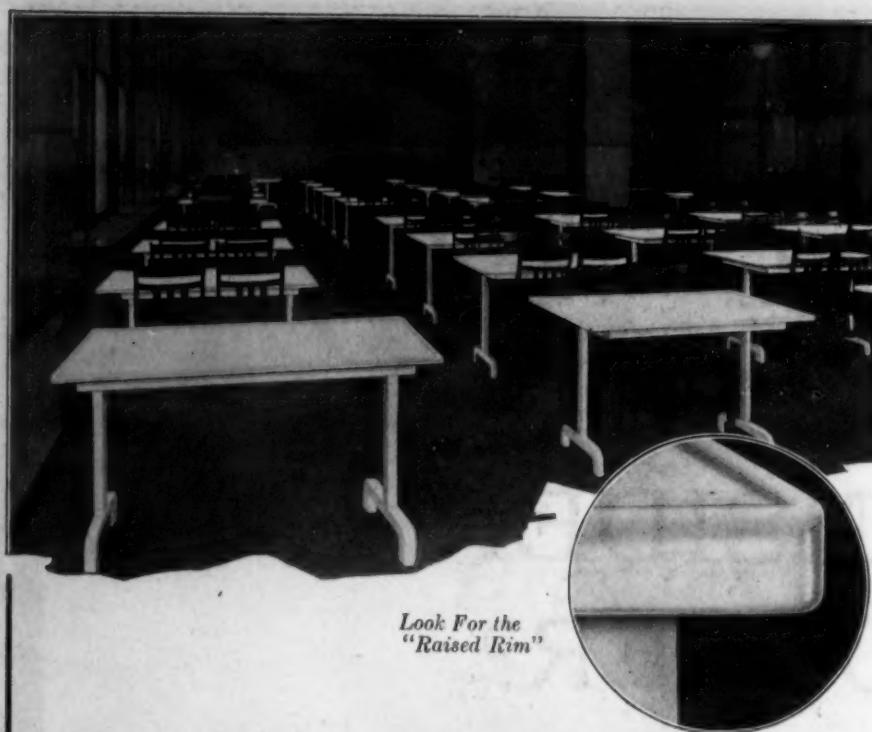
Shall be a paste filler made of linseed oil, silax, and coloring matter, and furnished in 25 pound packages.

Natural Oak Filler.

Bidders shall name price per ream for sand paper, and designate in bid size of sheets. The following grades of sand paper to be furnished: No. ½, No 1½ and No. 2. The No. 2 to be Garnet paper.

Carbon Black Paint.

This paint shall consist of pigment 30%, liquid 70%.



MAIL THIS COUPON TO-DAY!

We will send you our latest catalog showing this and many other types of Sani-Onyx and Sani-Metal, school and industrial lunch room equipment. Our engineering department is at your disposal. We have arranged space for many schools and can do the same for you. Send us the size of your space and we will forward blue-print layouts free of charge to suit your requirements. Send coupon today.

Sani Products Co.

824 Sani Bldg., 209 W. Randolph St., Chicago, Ill.

Note: The Sani Products Co. is a selling organization to merchandize the combined catalogued products of the Marietta Mfg. Co., Indianapolis, Ind., and the Chicago Hdwe. Foundry Co., North Chicago, Ill.

Pigment: Carbon black 20%, balance aluminum silicate, or magnesium silicate, or a mixture thereof.

Liquid: Raw linseed oil 80%, balance dryer, turpentine, volatile mineral spirits, or a mixture thereof.

Paint shall weigh not less than nine (9) lbs. per gallon, and shall dry in eighteen (18) hours, to a full oil gloss.

BUILDING AND FINANCE.

Detroit, Mich. The board of education has been allowed a total of \$31,201,024.17 for the fiscal year 1920-21, which is divided as follows: Maintenance fund, \$12,382,004.43 and capital costs \$18,819,019.

For the \$18,819,019.74 in the capital costs fund, the board will build 21 new additions to elementary buildings and will erect eleven elementary buildings. The combined capacities will care for 14,960 children and will represent an estimated cost of \$6,552,465.

There will also be constructed five intermediate schools at a cost of \$4,400,000, two metropolitan high schools costing \$1,600,000 and a new unit for crippled children to cost \$200,000.

To care for this program and to provide for future buildings, 38 pieces of land will be condemned and purchased for elementary sites. The total program will provide accommodations for 25,860 pupils and will eliminate half-day sessions.

Fifty thousand dollars will be spent this summer in cleaning and renovating the schools of Louisville, Ky.

Dubuque, Ia., has voted favorably on a bond issue of \$785,000 for the erection of two Junior High School buildings. The success of the bond issue means that Dubuque will have three high school buildings—the new senior high school for which \$715,000 in bonds were carried a year ago, and the two Junior High Schools to be erected from the present bond issue. The estimated cost of the three structures is \$1,500,000.

The Lancaster county commissioners have been ordered to certify a levy of 80 mills to cover combined needs of the Lincoln, Neb., city schools. This levy is to cover the \$310,000 deficit which will be incurred in the \$1,082,000 budget for the

coming year. The legislature limits the levy for general school purposes to 28 mills, which would raise \$722,456 for the coming year on a valuation of \$19,000,000. For maintenance of buildings and grounds twelve mills more are allowed.

The East Pennsboro, Pa., township school board has been forced to change its plans or do without additional school facilities due to the high cost of construction. The lowest bid for a new school building was \$20,000 higher than the board had purposed to pay.

Council Bluffs, Neb., issued school bonds in the amount of \$475,000, and entrusted the sale to a bond house. The latter delayed the sale and finally questioned their validity. The board has now brought an action against the bond house for \$25,000 damages in the impairment of values and \$60,000 damages owing to increased cost of the high school now in course of construction.

Seattle, Wash. The voters have been asked to authorize a special tax of six and one-half mills in addition to the ten mills at present allowed by law. The six and one-half mills which the voters have been asked to authorize, will yield approximately \$1,560,000.

Because of an overcrowded condition in the High School of Commerce at Worcester, Mass., there will be no first half-year freshmen. Those who desire to pursue a commercial course will spend their freshmen year in one of the three remaining Worcester high schools and then enter Commerce. The total registration is approximately 2,000.

The board of education of the City School District of Middletown, Conn., is considering the use of portable school buildings. There are indications that there will be from eight to nine classes on part-time next year owing to crowded conditions.

The board of education of Chatham County, Ga., will purchase a number of portable schoolhouses to meet congested conditions. Each will accommodate about 50 pupils and cost \$1,000.

The state school fund of Texas available for the ensuing year has been increased by \$4,000,000 from the general fund. The addition will enable the per capita apportionment next year to go to

Up-to-date Schools

Are you running an up-to-date school? Do your pupils have to carry cold lunches that become uninviting by lunch time? Give them a chance, by providing hot, wholesome lunches that are full of warmth and energy. Install a sanitary lunchroom where they can secure a good meal at a minimum cost. Sani-Onyx Tables with Sani-Metal Bases will meet all your requirements.



Sani-Onyx Table Tops have a "Raised Rim" which prevents chipping and keeps dishes from sliding to the floor. No table cloths needed. Think of the saving in laundry bills alone. Simply wipe the surface with a damp cloth and they will always be clean and inviting. Sani-Metal Bases are made of fine grained cast iron, heavily coated with porcelain enamel. No projections or crevices for dirt to collect. Look better than the ordinary varnished kind and will last a lifetime.

Sani Products Co., 824 Sani Bldg.,

209 W. Randolph St., Chicago, Ill.

Gentlemen: Please send me your latest catalogue showing SANI-ONYX and SANI-METAL, school and industrial lunch room equipment to accommodate pupils. The space is ft. by ft.

Name

Address

\$12 or over and will provide increases in teachers' salaries.

Columbus, O. School Architect David Riebel of the board of education has estimated that \$5,000,000 will be needed to carry out the proposed building program. Mr. Riebel estimates that several hundred thousand dollars will be required for the purchase of suitable sites.

The board of school commissioners of Indianapolis, Ind., has accepted a bid of \$1,449,809 on an issue of \$1,645,000 worth of 4½ per cent, twenty-year bonds. The bid carries with it a discount of \$195,190.

Bakersfield, Calif. Inability of the Kern County Union High School board to dispose of \$2,000,000 in bonds has resulted in a decision to erect several cheap frame structures for meeting immediate needs. Plans have been completed for two units of four classrooms each.

Mayor Peters and the city council of Boston have accepted a legislative act permitting the school board to raise \$2,146,094 this year for new buildings and repairs and alterations to existing structures. It is planned to spend nearly \$2,000,000 this summer on repairs and alterations to 273 permanent school buildings and forty portable structures.

The school board of Columbus, O., has been giving the greater part of its attention during the past few months to measures for the solution of financial problems. An investigation has been made of the sources of taxation to relieve the inadequacy of the present tax levy. An extra three-mill levy will be voted upon in the near future, and if approved, will give the schools sufficient money for running expenses. By voting adequate relief in the fall and passing the bond issue for new buildings, the Columbus financial system can be made adequate.

A drastic curtailment of school activities has been proposed at Malden, Mass., to keep the expenditures of the schools within the appropriations. Among the activities which will be reduced will be school nurses, evening schools, physical training, school visitors and primary assistants.

(Concluded on Page 71)



Lunch Room, Nicholas Senn High School, Chicago

Why the School Lunch Room?

The objective of the school is to fit the pupil for the business of living. No child that is undernourished is properly fitted to take his place in modern society. Cold lunches at noontime do not furnish the proper nutrition for the afternoon session. Then, too, all children require food for growing. The fact that the majority of school children are improperly fed is borne out by the marked improvement in the scholarship in schools that have installed lunch rooms.

The school lunch room does not necessarily entail a large investment, and can be made to pay all expenses and still furnish hot dishes to students at a remarkably low price. Often a five cent bowl of soup is an adequate supplement to the lunch carried by the pupil. In many schools the domestic science classes prepare part of dishes for the lunch room. Here it is possible to make a saving of the cost of the materials for the domestic science rooms. Courses in this manner are rendered much more practical as the students are not forced to work with abnormally small qualities because of the high cost of materials.

We invite consultation in the planning of school lunch rooms and domestic science departments. This will incur no obligation on your part. Our service includes the designing, complete outfitting and installation of these establishments. Many of the finest school cafeterias in the country are the products of our service organization.

OTHER SCHOOL LUNCH ROOMS WE HAVE FURNISHED

Carter Harrison High School	Chicago, Ill.
Mississippi Woman's College	Hattiesburg, Miss.
Moline High School	Moline, Ill.
Harrisburg High School	Harrisburg, Pa.
Nicholas Senn High School	Chicago, Ill.
Valparaiso University	Valparaiso, Ind.
Nebraska State Normal School	Peru, Neb.
Sam Houston Normal Institute	Huntsville, Texas
South Dakota State College	Brookings, S. D.
State Teachers' College	Greeley, Colo.
Milligan's College	Jackson, Miss.
Academy High School	Erie, Pa.
Sapulpa High School	Sapulpa, Okla.
Iowa State College	Ames, Iowa
Muskegon Commercial College	Muskegon, Mich.
Lake View High School	Chicago, Ill.

We have prepared several books and bulletins which will interest you. These will be sent to you at your request. To avoid error kindly mention the books by number.

Y10—Equipment for Cafeterias, Lunch Rooms, Restaurants and Dining Rooms.

Y151—Feeding the School Child.

Y152—Practical Domestic Science in City and Country Schools.

Y21—General Catalog of Furnishing, Equipment and Supplies.

ALBERT PICK & COMPANY

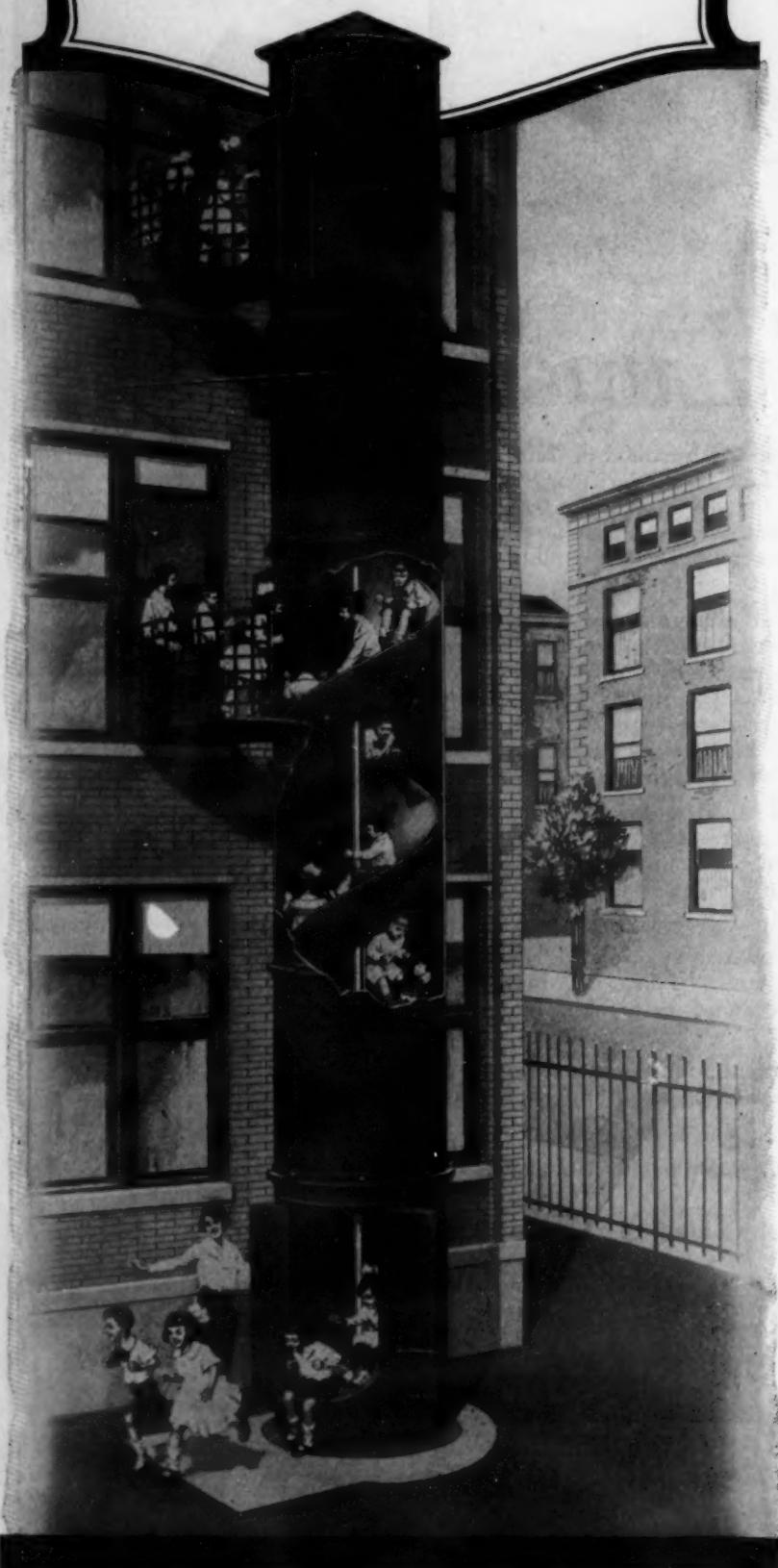
208-224 W. RANDOLPH ST.  CHICAGO, ILLINOIS

DOW
LOUISVILLE

Procrastination's Cost

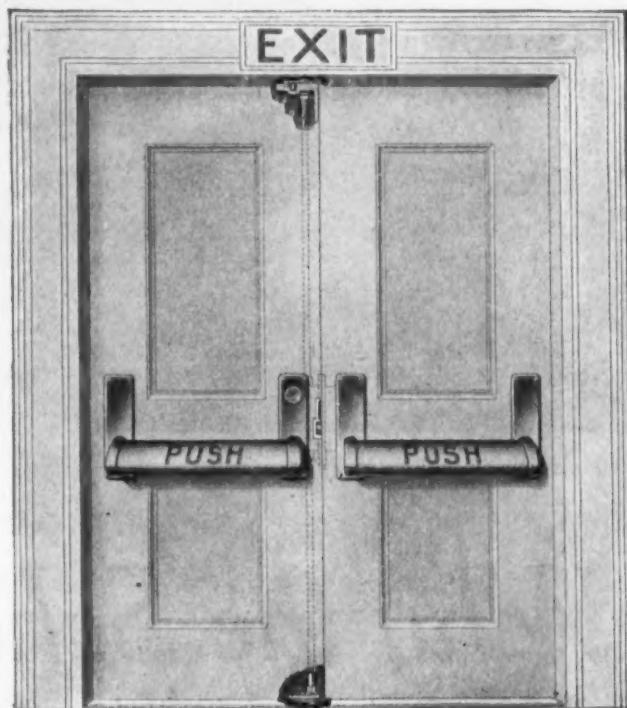
Year after year the school board had neglected replacing the obsolete fire escapes in a congested school building. One day a fire broke out—many young lives were lost. The school board was directly responsible.

Kirker-Bender Fire Escapes have, by actual test, emptied entire buildings of over a thousand children in seventy seconds. It is impossible to block or jam them. The school board is entirely responsible for the young lives placed in their care. Write for full particulars. Dow Wire and Iron Works, Incorporated, Louisville, Kentucky.



Quick exit assured Safety provided

Members of school boards and other officials on whom the responsibility rests should make full provision for protection to life in case of panic by the use of this safety device.



SARGENT

Reg. U. S. Pat. Off.

Fire Exit Door Bolts

as illustrated above, are attractive in appearance, strong in construction and quick in action. The construction is such that in operating the push bar the hands or arms cannot be caught between the bar and the door.

They have a wide push bar which projects only $2\frac{1}{2}$ inches from the surface of the door, permitting the door to swing wide open so as not to obstruct passage through the doorway. Slight pressure on the bar at any point will release the bolts instantly. All edges and corners on the bars and brackets are carefully rounded, eliminating all possibility of wearing apparel becoming accidentally caught.

Sargent Fire Exit Door Bolts,
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Architect
J. Horace Cook, Philadelphia

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REPRESENTATIVES IN ALL PRINCIPAL CITIES

(Concluded from Page 68)

Conshohocken, Pa. The school tax for 1920 will be increased three mills to meet extraordinary expenses. The new rate will be about 14½ mills.

Lynn, Mass. In view of the high cost of school furniture, the board has decided to use the old seats and desks of the Ontario School in the new building. The furniture has been cleaned, sanded and re-varnished at a cost of less than \$1 for each piece.

A budget totaling \$25,201,685.56 has been passed by the school board of Chicago, Ill. This amount exceeds the 1919 budget by more than \$5,000,000, the greater part of which has been given to salary increases.

The budget is divided up as follows: Administration purposes, \$1,168,274.50; instruction \$19,938,694.51; operation, \$2,932,643.55; auxiliary activities, \$719,573; miscellaneous, \$442,500.

With an increase of some \$5,000,000 in the school tax levy this year, the estimated revenue available for educational purposes will amount to \$22,185,591.46. The state per capita tax furnishes \$2,176,868.04 of this sum. Instruction in the elementary day schools will cost the city \$14,418,371.25 as against \$10,403,280.30 last year, and the evening schools call for \$319,460 this year, last year's appropriation having been \$244,520. An appropriation of \$22,350 has been recommended for Americanization work. The resources for building purposes amount to \$8,534,957.39.

Kentucky State Auditor John T. Craig has announced the amounts on hand in the different funds of the school system as of July 1. They follow: School fund, \$223,486.61; State University, \$861.71; Eastern State Normal School, \$307.76; Western State Normal, \$307.76.

In bids by contractors on improvements and repairs of various school buildings at a recent meeting of the building committee of the Louisville Board of Education, work estimated at from \$50,000 to \$60,000 was figured from \$100,000 to \$110,000. The building committee will report to the Board of Education at its meeting this week.

Mr. Chester B. Lee has joined the firm of Mills, Rhines, Bellman & Nordhoff, architects, located at 1234 Ohio Bldg., Toledo, Ohio.

At a special school election in Benton Harbor, Mich., Monday, May 3, the voters granted authority to the board of education to levy a tax of \$40,000 in addition to the maximum allowed by the city charter. The \$12.50 per \$1,000 valuation would not yield within \$40,000 the amount necessary for the maintenance of the school system for the next school year. The success of the election was due to the united efforts of the Kiwanis Club of Benton Harbor, which not only endorsed the issue, but to a man went out and helped put it over.

The entire cost of the public school system of Los Angeles county during the last fiscal year ended June 30, 1919, including expenditures for improvements, redemption of bonded indebtedness and payment of interest on outstanding bonds, was \$10,691,963.42. This amount is approximately 60 per cent of the total expenditures made by the county government for that period.

Maintenance and operation of kindergarten schools, \$457,130.80; elementary schools, \$4,938,810.68; high schools, \$3,589,913.97; or a total for maintenance and operation, including salaries paid to teachers, purchase of supplies, repairs to equipment and buildings and other operative expenses, of \$8,985,855.45. By analyzing this detailed cost it shows that there was expended \$6,538,846.36 for salaries of 5,335 teachers and \$2,457,009.09 for other expenses.

Expenditures for the construction of buildings, purchase of furnishings and equipment, and payment of principal and interest on maturing bonds, classified under the governmental term of "capital expenditures for outlays," amounted to \$1,706,107.97 during the fiscal year ended June 30, 1919. Segregating this amount, it is found that for the construction of new elementary school buildings there was expended \$510,152.20; for high school buildings, \$13,597.36; for the redemption of elementary school bonds, \$345,170; for high school bonds, \$185,750; for interest on outstanding elementary school bonds, \$385,984.71, and for high school bonds, \$265,453.70.

The revenues for school purposes during this period total \$10,837,884.34, of which \$9,152,559.42 was contributed directly by the taxpayers of the County of Los Angeles, \$1,346,696.59 being raised for elementary schools from the general county levy, the rate being 16 cents on \$100 of valuation; for high school purposes a general county levy was made amounting to \$1,177,357.75, the rate being 14 cents; from school district taxes levied only against the taxpayers in each district, there was levied and collected for elementary school purposes \$3,910,597.94, and for high school purposes, \$2,717,907.14, the rates in each school district varying from 30 cents to \$1.77 per \$100 valuation.

The county of Los Angeles is divided into 155 elementary school districts and twenty-six high school districts, fifteen of which are union high school districts composed of from two to thirteen elementary school districts, having comparatively low taxable valuations, which are combined for economical and geographical reasons to secure superior educational facilities.

There are 1,174 school properties in the county, valued at \$29,523,609 and the outstanding bonded indebtedness of all school districts aggregating \$14,211,160 on January 1, 1920.

Messrs. Stork & Knappe, architects specializing in school work, have announced the removal of their offices from Palisade, N. J., to King Street, Ardsley, N. Y.

Memphis, Tenn. The board has adopted a salary schedule providing for a minimum of \$1,000 and a maximum of \$2,000 for grammar school teachers, and a minimum of \$1,200 and a maximum of \$2,200 for high school instructors.

Marlboro, Mass. The board has increased the salary of the superintendent \$500.

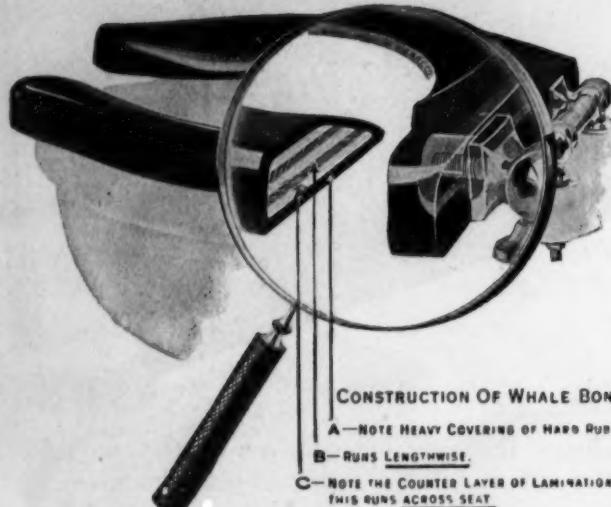
Louisville, Ky. The teachers have been given flat increases of \$500.

Dixon, Ill. A salary schedule has been adopted under which instructors in elementary schools will receive a minimum of \$1,000 a year and those in the high school \$1,250.

Aurora, Ill. Teachers in the grades have been given increases of \$400 a year. High school principals will receive \$1,000 a year.



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- This includes Toilet Seats.
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WHALE-BONE-ITE SEATS

- The lifelong sanitary Seat, you save all this.

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THE SHORTAGE OF HIGH SCHOOL TEACHERS.

An alarming shortage of material for teaching positions in high schools has been found by a nation wide study of the high schools and of the teacher preparatory institutions by Mr. A. O. Neal, specialist in rural school administration for the United States Bureau of Education.

A questionnaire sent to all high schools and teacher training schools shows that at the present time in the 7,088 high schools reporting there are 65,857 teachers. Based on the certain increase in high school enrollment it will be necessary in 1920 and 1921 to employ 98,775 teachers. Vacancies reported thru resignations, etc., total 17,275 or 26 3-10 per cent of the total number of teachers employed in the schools. Applying this percentage to the total number of teachers in the schools and to the certain increase which will be necessary, Mr. Neal estimates that 25,978 positions must be filled before September 1st.

The seriousness of the situation is brought out in the replies received by Mr. Neal from 323 institutions which are preparing teachers. These represent 60 per cent of all the schools which are preparing men and women for teaching positions. The total number of graduates in the schools is 20,070 and a conservative estimate of the total number in all institutions is 33,345. A study of the intentions of the graduates shows that only 6,372 of the 20,000 intend to enter high school work. Assuming that this is 60 per cent of the total who intend to teach, the estimate is that 10,620 graduates will actually take up teaching in the fall. Mr. Neal estimates that at least 15,350 positions in high schools must be supplied with teachers from outside the group of college graduates. The sources of supply for these additional teachers are 1, recall of former teachers who have withdrawn from the work, 2, teachers with less than college degrees, and 3, the omission of classes which are without teachers. Mr. Neal urges that school boards do everything in their power to maintain the standard qualification of high school teachers and to make work in the high schools as attractive as possible. He argues for increases in salaries and for a vigorous campaign to induce young men and women

who have not expressed an intention to enter the work.

SCHOOL HYGIENE NOTES.

The home demonstration agents in several counties of Vermont carried on more or less work in establishing hot lunches in the schools during the past two years. The reports from the teachers testify to the following results: 1. Better behavior of the pupils. 2. Gain in weight of children. 3. Improvement in ability to study in the afternoon. 4. More bread and butter, less cake and pie in lunches. 5. Parents and pupils enthusiastic over the change.

Louisville's first school for training teachers to correct defective speech will be opened June 28, O. L. Reid, city superintendent announced a few days ago. Formation of the school looks toward organization of special classes for stammering children as part of the work of the next school year.

A board of health eye clinic is conducted in Public School 64, Manhattan, New York City. The clinic examines children of the entering class and follows up all cases where glasses are needed. The work is considered of great value because it takes the children at the beginning of their school life and remedies eye defects before they have made great progress.

A special student from the school of social work assists in following up the children and in obtaining the cooperation of parents where children require glasses.

The school also conducts a nutrition clinic which, while especially intended for research, has a practical aspect. This year all the children of the entering class were weighed and measured the first week of school. Those who proved to be seven or more per cent under weight were placed in a special class and problems of health made the center of their curriculum. Much home visiting was done and mothers' classes were held in connection with the work. It is recommended that the work be taken over and made a permanent part of the school.

The adoption of a proposed nutrition clinic system in the schools of Manchester, N. H., will call for a thoro physical examination of all

pupils. Those found below standard weight for their age will be put in special nutrition classes where instruction will be given in the proper manner of overcoming their handicap. According to Miss Mabel Skilton, secretary of the nutrition clinic of Boston city, the five chief causes of mal-nutrition are physical defects, lack of home control, over-fatigue, faulty food habits, and faulty health habits.

Provided the sum of \$5,000 will be furnished the school board of Manchester, N. H., will establish an open-air school for tubercular children, of whom there are said to be 160 in the public schools. The expense of fitting up the building is estimated at \$11,000, of which amount the State Tuberculosis Association has assured the provision of \$6,000, leaving \$5,000 which the city has been requested to provide.

The superintendent and medical director of the schools of Boston, Mass., have been authorized to make a report on criticisms made by Dr. Emerson on medical inspection in Boston schools.

The state's system of inspection and registration of pupils has been introduced into the schools of Three Rivers, Mass. Under this system, each child is examined by a physician when it enters school in the first grade, and each year following to and including the ninth grade. A complete record is kept on a card, and it is considered particularly valuable if the pupil desires to go to work as the state law requires a physician's examination.

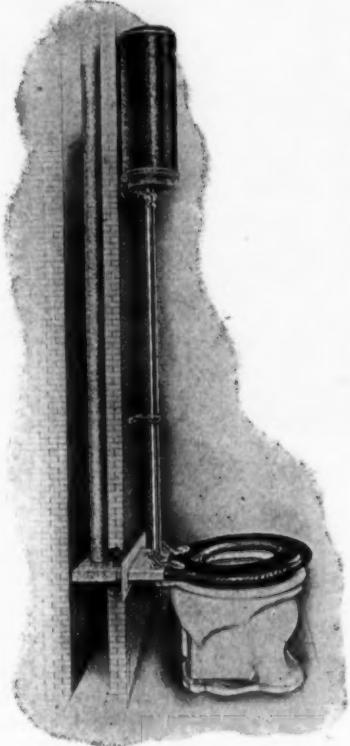
Superintendent Clarence H. Dempsey of Haverhill, Mass., has called the board's attention to the need of a physical instructor for individual work at the high school. According to Dr. Symonds a number of pupils have serious physical defects and between 40 and 45 have spinal troubles.

The first physical examination of pupils of several schools at Dunbarton, N. H., has been completed. As far as health is concerned the pupils were found to be above the average.

Hot school lunches have been established in 59 schools in six counties of the state of New Hampshire because a large percentage of the children come from such a distance that they bring their lunch which is usually a cold one.

"XONCO" PLUMBING FIXTURES FOR SCHOOLS

"The Standard for Over Fifty Years"

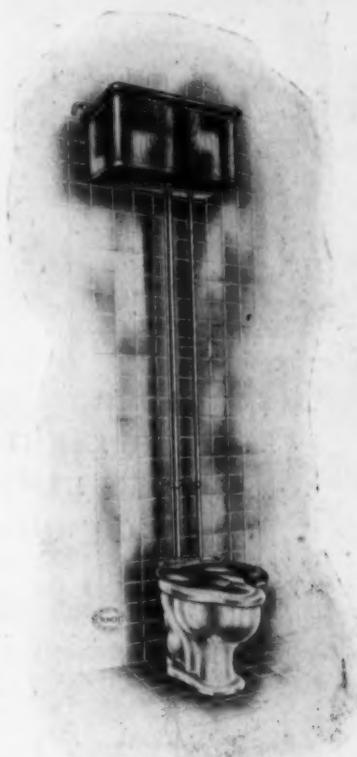


Xonco Plumbing Fixtures combine mechanical perfection with beauty of appearance—and are absolutely sanitary in every respect.

They are scientifically designed to give satisfactory service under the most unusual and trying conditions.

Remember, we have been manufacturing plumbing fixtures for schools for over fifty years. We know what is required and are prepared to supply you with the very best.

Our many years of service to the School Boards of America is a record of which we are proud.



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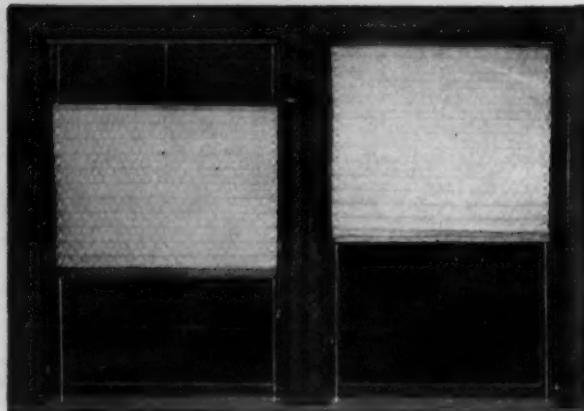
The privy is an institution of the DARK AGES. Don't preach one thing and practice another! Let us figure with your Board on the installation of really modern equipment.

The Perfection Chemical Toilet System—safe, sanitary, odorless, economical, easy to install. Cheaper than plumbing. Endorsed by state and national authorities.

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Better Light and Air
While Beautifying Every
Schoolroom**

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Athey Perennial

ACCORDION PLEATED
WINDOW SHADES

are waterproof, translucent, giving all available light without the glare of the sun, permit the occupants of each room to "follow the sun"—giving full control of both air and light because they

GO UP FROM THE BOTTOM
DOWN FROM THE TOP, OR BOTH;
AND ALL BY THE PULL OF A CORD.

No hand need touch the shade itself. No dirty finger marks need deface it; and it is made of a highly calendered translucent Imperial coutil cloth which sheds dust, and can be cleaned at small expense.

SHADES ARE BEAUTIFUL

They give the general effect of costly Venetian blinds; yet cost less than the cheapest roller shades, per year of service.

They appeal to the aesthetic sense; contribute to the health and daily comfort of pupils and teachers; and cost less in the long run than the cheapest shades you could buy.

If you want all the people to sing your praises, equip your schools with Athey Perennial Accordion Pleated Window Shades.

Shades have been installed in hundreds of schools and have been adopted by the Government for all Government Schools in Panama, Porto Rico and the Philippines.

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Public School, Ridgefield, N. J.

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Our Engineering Staff is at your service.

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Tested and approved by Good Housekeeping Institute.

Used now by housekeepers everywhere.

Should be part of the equipment of every Household Economic and Domestic Science Department.

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Third--The efficiency of the teachers.

Fourth--The economy of your operating expenses.

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Milwaukee,

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TEACHERS' SALARIES NOTES

(Continued from Page 52)

with four years' experience, \$1,450; those with five years' experience, \$1,500; those with six years' experience, \$1,550; those with seven years' experience, \$1,600; those with eight years' experience, \$1,650; those with nine years' experience, \$1,700 and those with ten years' experience, \$1,750. Teachers in the seventh and eighth grades who have eleven years' experience will be paid \$1,800 and those with twelve years' experience \$1,850.

High school teachers, not including those supervising the teaching of special subjects, will be paid on a similar basis. Teachers without experience will be given \$1,300 to \$1,500; those with one year of experience, \$1,560; those with two years' experience, \$1,620; those with three years' experience, \$1,680; those with four years' experience, \$1,740; those with five years' experience, \$1,800; those with six years' experience, \$1,860; those with seven years' experience, \$1,920; those with eight years' experience, \$1,980; those with nine years' experience, \$2,040, and those with ten years' experience, \$2,100.

Elementary principal, ten teachers and not more than 24, will be given a minimum of \$1,800 per year and a maximum of \$3,000. Principals with 24 or more teachers will be given a maximum of \$3,300 a year.

It is provided that extra compensation shall be given to principals, supervisors and teachers for attendance at summer school. An allowance will be made to each teacher covering one-half of the items of expense, up to a maximum allowance of \$100.

Edinburg, Ind. Grade teachers have been given increases of 35 per cent and high school teachers 40 per cent.

The Board of Education of Duluth, Minn., has adopted a new salary schedule as follows: For the school year 1920-21 the sum of \$225 will be added to the contract salary of all teachers, principals, and supervisors who are reelected. This will make an increase of \$425 for each teacher with normal school standing, credited with teaching during the entire session 1919-1920, and \$475

for those with college standing, or a total of approximately \$265,000.

Under the schedule for 1920-21 normal school graduates will be paid a minimum of \$1,200 with annual increases of \$75. College graduates will receive a minimum of \$1,400 and increases of \$75.

Dubuque, Ia. The board of education has adopted a schedule providing for flat increases of \$100 for all teachers reappointed for the year 1920-21. In addition, each teacher who has given five years or less service, will be given an increase of \$300, and any teacher with more than five years' experience will be given \$400.

Under the schedule, the maximum for teachers in grades one to six inclusive is \$1,600, for grades seven and eight \$1,680, for women high school teachers \$2,050, for men high school teachers \$2,400, for men principals in grade schools \$2,600, for women principals \$2,200, for manual training teachers in the grades \$2,000 and for domestic science teachers \$1,700.

The schedule provides for increases of 146 per cent over previous salaries and represents an additional expenditure of approximately \$75,000.

The school board of Rochester, N. H., has adopted a salary schedule under which teachers are classified according to training and experience. Teachers in both the grades and high school are divided into four groups, Class A, Class B, Class C, Class D. The schedule is as follows:

Grade Teachers—Teachers in Class D will receive \$700 the first year and \$750 the second year; teachers in Class C will be paid \$800 the first year, \$850 the second year, \$900 the third year, \$950 the fourth year, and \$1,000 the fifth year.

High School Teachers—Teachers in Class D will begin at \$700 and will be paid \$750 the second year; teachers in Class C will be paid \$800 the first year, \$850 the second year, \$900 the third year, \$950 the fourth year, and \$1,000 the fifth year; teachers in Class B will be paid \$1,050 the first year, and teachers in Class A \$1,100.

Teachers new in the service are to be placed in Class C, and the second year will be given their proper class rating. Class D teachers will be advanced to Class C after two years or dropped from the service. Class C teachers after five years, will be advanced to Class B and Class A if qualified. Class B teachers may be advanced to Class A upon completion of four years at a summer school.

As soon as the school board of Holyoke, Mass., had voted an increase of salary for the teachers a large delegation of pupils awaiting the result sang "Glory, glory, Hallelujah."

In its eagerness to meet the salary situation the school board of Newburyport, Mass., overlooked the legal limitations. The supreme court has decided that the increases made, totaling \$10,000 are illegal because they had not been voted by the city council.

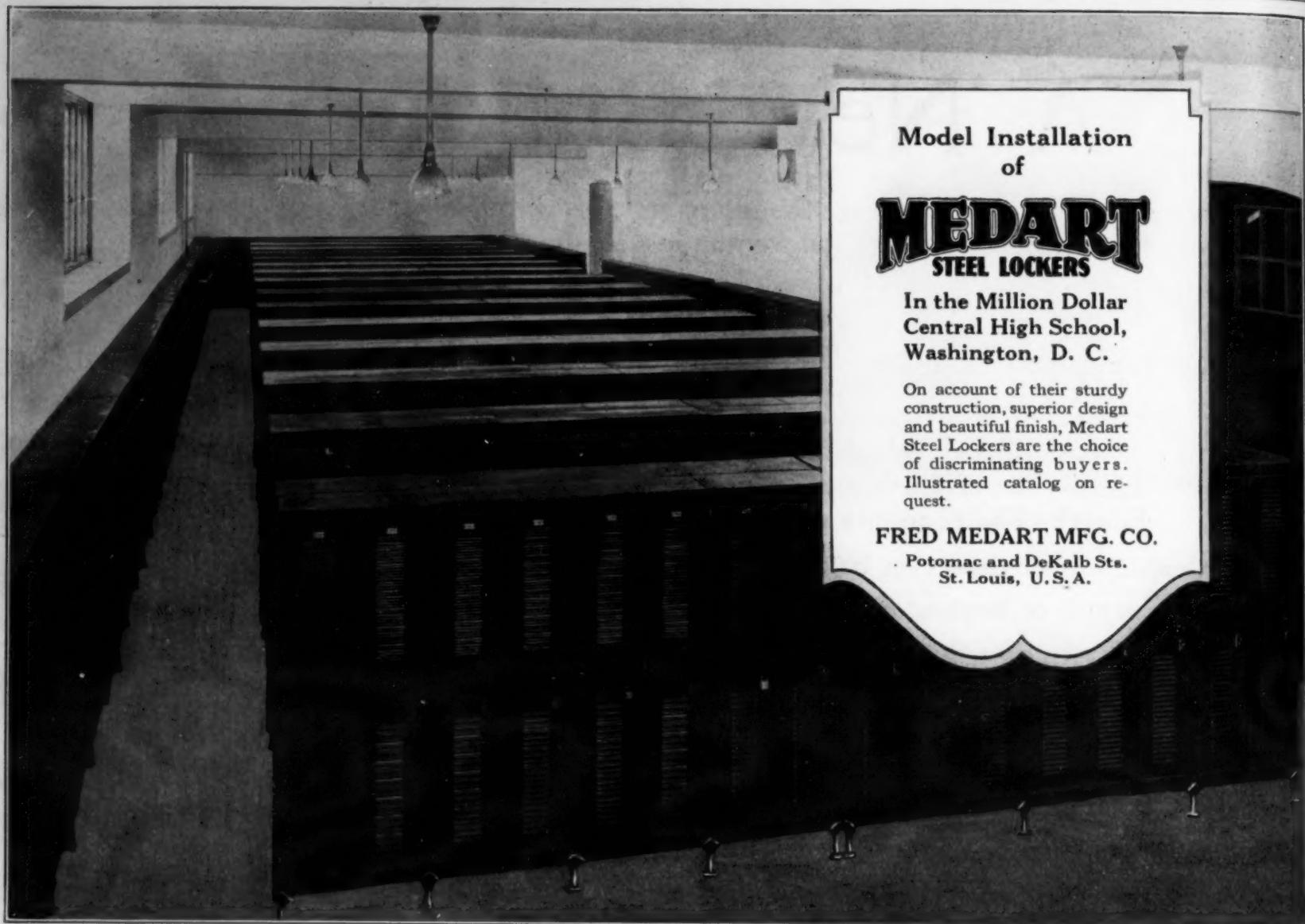
The teachers of Louisiana propose a minimum wage law. It provides for a minimum wage of \$1,200 for cities having a population of more than 100,000; a minimum wage of \$1,000 for cities having a population of from 10,000 to 100,000 and a minimum wage of \$800 for cities having a population of less than 10,000.

The teachers of Los Angeles, Calif., are in revolt on the salary question. They have not determined whether to sign contracts for the ensuing school year.

New Bedford, Mass. The board of education has adopted a salary schedule which represents an increase of 70 per cent for the grade teachers. The schedule which went into effect in May, 1920, is as follows:

Elementary school assistants, minimum \$1,350 and maximum \$1,700; grade supervisor, maximum \$2,850; elementary principals, Class A, maximum \$3,350; Class B, minimum \$1,750 and maximum \$2,850; primary principals, maximum, \$1,800 to \$2,100.

High school assistants (male) minimum \$2,225 and maximum \$2,725; women assistants, minimum \$1,800 and maximum \$2,300; heads of departments, maximum \$3,100; assistant principal, maximum \$3,600, and high school principal, maximum \$4,725. The assistant superintendent



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of schools will receive a maximum of \$3,600 and the superintendent \$5,500.

Lockport, Ill. The minimum salary of the teachers has been raised from \$1,200 to \$1,800 and the maximum from \$1,800 to \$2,400. The superintendent's salary has been raised from \$2,760 to \$3,500.

The Amarillo, Tex., schools have met the increasing cost of living in a unique way. The school year of 48 weeks has been divided into three terms of sixteen weeks each and each pupil in the city will be given free tuition for two of these terms and allowed to make his grade in a year as at present. Under such an arrangement, only two-thirds of the pupils will be in school at one time, hence only two-thirds of the teachers will be needed. If these teachers were paid at the same rate as at present, the annual payroll would be just two-thirds as much, as the teachers will teach for twelve months in the year instead of nine as heretofore. The annual salaries of these two-thirds have been increased about fifty per cent which brings the payroll to about where it was before. To give the figures: The payroll last year was \$84,000. If this amount be reduced by one-third, we have \$56,000, and if this increased be \$56,000 by fifty per cent, we have \$84,000 again. As a matter of fact, the salaries of teachers have been increased a little more than fifty per cent and the payroll for next year will be about \$90,000.

Next year, no teacher in the Amarillo schools will receive less than \$1,236, and the salaries will range from this amount to \$2,260.

Under the type of plan now in operation, the three terms will be as follows: From September first to the Christmas holidays; from the Christmas holidays to about April twentieth; and from April twentieth to about August eighth. There will be one week's vacation during the Christmas holidays and three weeks in August. The plan was put into operation by opening the schools to one-third of the children during the present summer. Another third will enter September first and from then on, there will be two-thirds of the children in school. The last third will not enter until January first. Before

the plan was started, the pupils were divided into three equal groups with regard to grades and half grades, each one being given the term of his parent's choice so far as this could be done.

New Britain, Conn. A resolution has been adopted by the New Britain Teachers' Club whereby there will be a minimum salary of \$950 to \$1,000, with \$100 annual increases until the sixth year, a \$200 increase in the sixth year, and \$100 increases each succeeding year until a maximum of \$1,950 is reached in the elementary grades and \$2,050 in the grammar grades.

Indianapolis, Ind. The bonus plan of increasing salaries of teachers, particularly as adopted by the Indianapolis school board, was criticised by members of the legislative committee of the Township Trustees' Association of Indiana. They declared that the method adopted in Indianapolis to increase the compensation of teachers has disrupted the rural school systems. They are in favor of increased pay for teachers, but insist that salaries shall be increased without resort to the bonus system. Their objection to the bonus system arises from their belief that teachers should be held to strict compliance with contracts until their expiration. They resent the bonus system because of the dissatisfaction resulting in rural districts where smaller salaries are paid.

Newark, N. J. Every Newark teacher on the annual payroll will receive a \$400 increase in salary in addition to regular schedule increases, which range from \$50 to \$200, beginning with the next school term. A \$100 bonus was paid to every teacher who entered the Newark school system since last September, and to substitute teachers. The board decided to include in the next budget a further increase of \$200 and to revise the salary schedule so that the regular annual increase will not be less than \$100.

Murfreesboro, Tenn. The state board has voted to increase salaries of state normal heads from \$3,600 to \$4,200 a year, also for a substantial increase for the teaching corps. In addition to the maximum salary recommended for the teaching corps the board voted to increase this maximum \$120 a year, this to cover certain summer school work.

Pekin, Ill. The minimum salary for teachers in Pekin, as shown by their schedule, is about \$100 per month.

Lincoln, Ill. The salaries for all grade teachers from the primary departments to the eighth grades were raised \$100. Under the new basis the lowest salaries for the grades will be \$1,120 and the maximum \$1,250.

Boston, Mass. A petition has been sent to the Waltham school committee asking for a \$300 salary increase. The teachers were granted a salary increase last February and now receive approximately \$1,300 a year. It was stated in the petition that living costs have increased 148 per cent since 1914 and that in that time the grammar school teachers' salaries have increased only 45 to 50 per cent.

Hillsdale, Mich. Graduates of the Ypsilanti State Normal College will receive a minimum salary of \$1,200 a year, and experienced teachers a minimum of \$1,500.

Warren County, Ill. The average salary for teachers in Warren County schools will be \$100 per month. The maximum salary at present is \$135 per month and the minimum is \$75.

Middletown, Conn. The board has given increases of \$100 annually until the maximum salary is reached. The maximum for male teachers in the grades is \$2,000 and for female teachers \$1,800. In the high school, the maximum for men teachers is \$2,700 and for women teachers \$2,200.

The school board of El Paso, Tex., has ruled that married women teachers shall not be employed in regular teaching positions after this year. Exceptions to the rule are teachers who are the support of families or incapacitated husbands.

It is provided that the married teachers shall be placed on the substitute list to be employed in cases of emergency.

The Oklahoma Educational Association has been reorganized to conform to modern ideas of state organizations with the home office in the capital city, Oklahoma City. The office which will open July first, is in charge of a salaried secretary.



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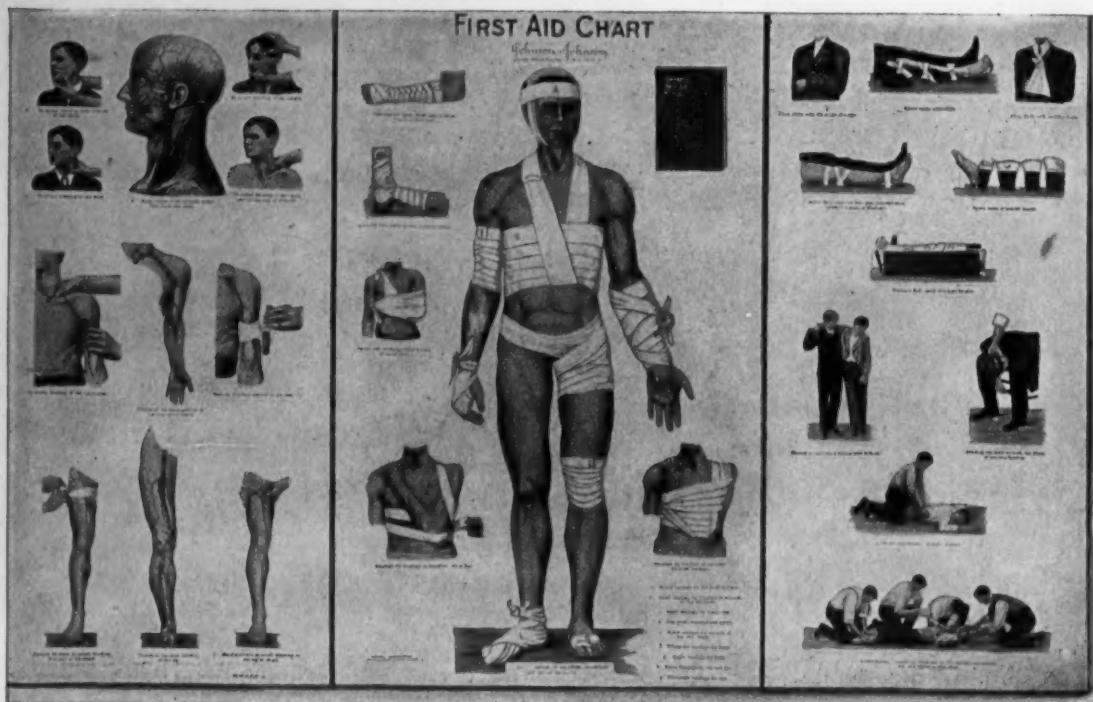
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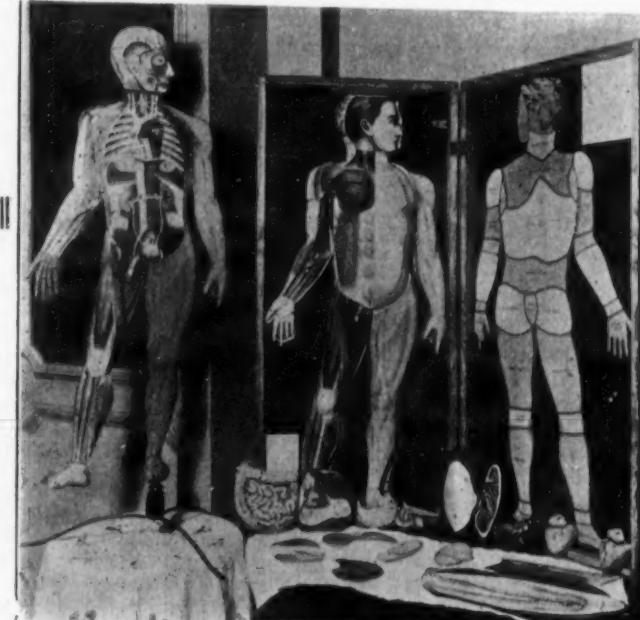
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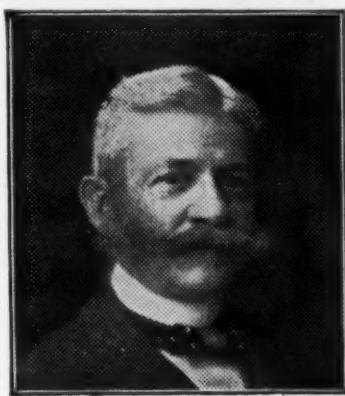
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PERSONAL NEWS of SUPERINTENDENTS

MR. BALLOU ELECTED.

Mr. Frank W. Ballou, Assistant Superintendent of Schools at Boston during the past three years, has accepted the superintendency at Washington, D. C., to succeed Mr. Ernest L. Thurston. The election terminates the fight made by Dr. John Van Shaick, Jr., president of the board of education, on Mr. Thurston.

Dr. Ballou is a native of St. Lawrence County, N. Y., and received his early education at Ft. Jackson. He graduated from the Potsdam Normal School in 1902 and received his bachelor's degree at Teachers College in 1904. He did post-graduate work leading to his master's degree at the University of Cincinnati, and received his doctor's degree in school administration at Harvard in 1914.

Dr. Ballou's experience as a teacher and administrator of schools has been broad and varied. From 1904 to 1907 he was principal of the technical school at the University of Cincinnati, and from 1907 to 1910 he was high school visitor and chairman of the committee on admission at the University of Cincinnati. From 1910 to 1914 he was at various times educational advisor for various Massachusetts cities, particularly Watertown, Milton and Reading, in which cities he conducted investigations and assisted in reorganizing programs of studies. He was a cooperating specialist in the New York school inquiry in 1911 and 1912 and conducted special research work in education at Milton, Mass., in 1913 and 1914. In the fall of 1914 the Boston school committee made him director of the department of educational investigation and measurement, and in 1917 elected him as an assistant superintendent of schools.

Dr. Ballou has been a frequent speaker before educational organizations and has been particularly known as a leader in educational research. His writings include a considerable number of monographs on educational subjects and of bulletins on educational investigation and measurement.

REID TO YOUNGSTOWN.

Mr. O. L. Reid of Louisville, Ky., on June first, was elected superintendent of schools at Youngstown, O., for a three-year term. The position carries a salary of \$9,000 for the first year and \$10,000 for the two remaining years.

Mr. Reid is a native of Ohio. He is a graduate of the old Chicago high school and of Indiana University, and has done graduate work in education at Indiana University, Teachers College and the University of Chicago.

Mr. Reid's professional experience began in the high school at Rensselaer, Ind., where he taught history and biology. In 1901 he became head of the English department of the Louisville Commercial High School, and in 1902 was made first assistant in English in the Male High School. In 1911 he was made principal of the Girls' High School and shared with the superintendent the task of consolidating the several girls' high schools. In 1916 he was elected superintendent of the Louisville schools to succeed Mr. E. O. Holland.

PERSONAL NEWS

Dr. John W. Abercrombie has once more become state superintendent of the Alabama schools. Dr. Abercrombie is the former president of the University of Alabama. He is also a former congressman and recently served as solicitor of the Department of Labor at Washington. He succeeds Spright Dowell who has been elected president of the Alabama Polytechnic Institute.

Dr. H. N. Goddard, for several years supervisor of secondary education in the Wisconsin Department of Education, has accepted the superintendency at Chippewa Falls.

Mr. H. N. Smith has been elected superintendent of schools at Oconto, Wis., to succeed E. F. Strong.

Mr. E. M. Walte of Menomonie, Wis., has accepted the superintendency at Manitowoc, at a salary of \$4,000.

Dr. Franklin P. Geiger, Superintendent of Schools, East Liverpool, Ohio, was elected President of the Ohio State Teachers' Association, at the annual meeting at Cedar Point, Ohio, June 22 to 25.

Superintendent Geiger is a member of the Ohio State Board of School Examiners.

Supt. F. L. Black of Lockport, Ill., has been reelected for the next year at a salary of \$3,500.

Mr. Arthur F. Harman, superintendent of schools at Selma, Ala., since 1908, has resigned. Mr. Harman has become superintendent of education of Montgomery County, Ala., at a salary of \$5,000. Mr. Harman is a former president of the Alabama Educational Association.

Supt. J. W. McClinton of Pueblo, Colo., has been elected President of the Chamber of Commerce of the city of Pueblo. Supt. McClinton is completing his third year as superintendent in District No. 1.

Mr. Spright Dowell, formerly State Superintendent of Public Instruction of Alabama, has accepted the position of President of the Alabama Polytechnic Institute.

Mr. Dowell who succeeds Dr. C. C. Thach, was appointed state superintendent of education in 1917 to succeed W. F. Feagin resigned. He is a graduate of Wake Forest College, N. C., and holds a degree from Columbia University.

Prof. Samuel Kline McDowell of West Aurora has been selected as superintendent of the Bloomington, Ill., schools at a salary of \$5,500. He is the successor of Prof. J. K. Stableton who resigned.

Supt. I. F. Matteson has been reelected for a term of three years at an increased salary, as head of the Findlay, O., schools.

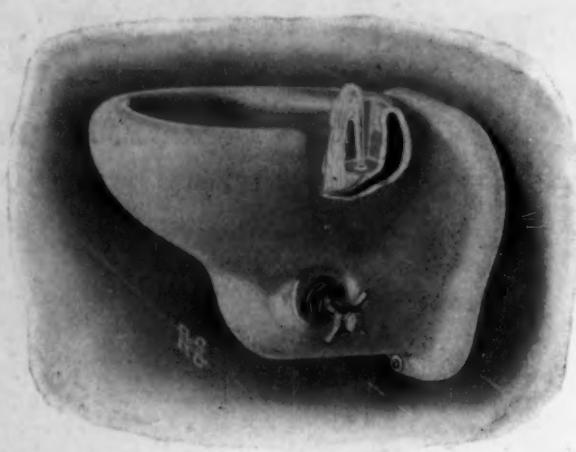
Supt. G. G. Lafferty has been reelected head of the Knoxville, Ill., schools for the ninth year.

Irving Munson of Spring Valley, Ill., has resigned to accept a similar position at Momence, Ill., at a substantial advance in salary.

Mr. Willard M. Whitman has resigned as superintendent of the Swampscott, Mass., schools

(Concluded on Page 81)

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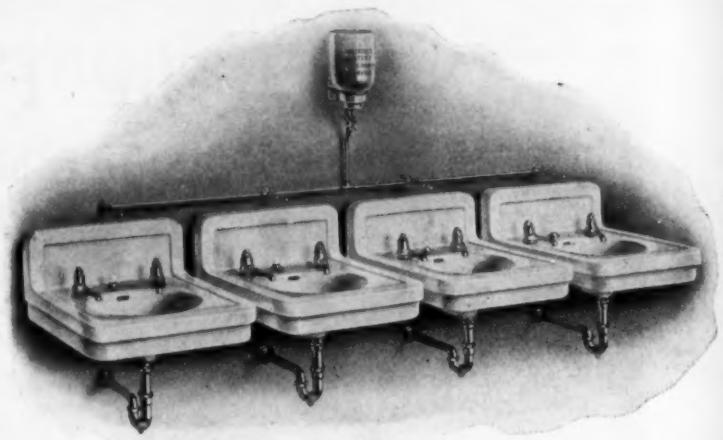
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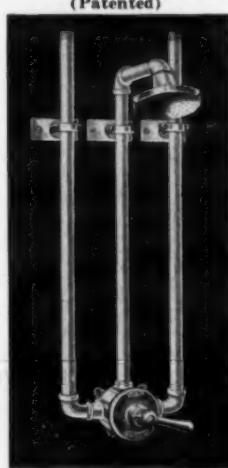
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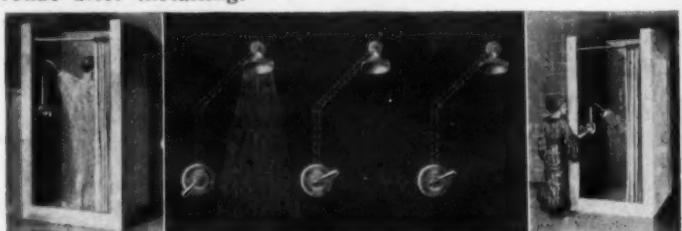
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(Continued from Page 79)

to accept a similar position at Marquette, Mich. His salary at Marquette will be \$5,000 the first year with an increase each year thereafter. He received \$4,000 a year at Swampscott.

Mr. J. O. Powers of Urbana, Ill., has been elected superintendent of schools at Mt. Olive.

Assist. Supt. R. J. McElroy of Rockford, Ill., has been called to the assistant superintendency at Akron, O., at a salary of \$5,500.

Mr. McElroy who has been in school work for 17 years, was recommended by Supt. Carroll Reed who recently accepted the superintendency at Akron. Previous to his three-year service in Rockford, he spent seven years as a high school principal and was identified with grade school work for a period of four years. During the past few years he has had charge of the school attendance and vocational work at Rockford.

Mr. J. B. Taylor, formerly superintendent of the vocational training schools at Camp Travis, Texas, has been appointed superintendent of the Brownsville, Tex., schools.

Mr. W. T. Doggett has been elected superintendent of schools at Denton, Tex. He is the successor to Mr. J. W. Beaty, resigned. His salary will be \$2,700 per year.

Miss Eva B. Shuman has been appointed superintendent of schools for Jefferson County, Neb., to succeed Mr. Henry Abrams. Miss Shuman was superintendent of the Fairbury, Neb., schools for the past two years.

Supt. H. J. Blue was reelected at Carlinville, Ill., schools. He will receive a salary of \$3,000.

Mr. Owen Jones was appointed superintendent of the Rosedale, O., school for the coming year.

Dr. H. A. Hartman, for the past seven years superintendent of the Marion, Ohio., city schools has resigned.

Mr. H. W. Hinkle was elected superintendent of the Paris, Ill., schools.

Supt. W. W. Thomas was reelected head of the Springfield, Mo., public schools.

W. L. Jayne, of Quicksand, has been appointed assistant inspector of rural schools for Kentucky by the Governor.

Supt. A. W. Smith of Rochester, N. H., has

been reelected for a term of three years, at a salary of \$3,000.

Supt. A. D. Montgomery of Edinburg, Ind., has been reelected at a salary of \$2,400, or an increase of \$600. Supt. Montgomery enters upon his fifth year at Edinburg.

Mr. C. S. Hottenstein, principal of the high school at Conshohocken, Pa., has been elected superintendent of schools in that city. Mr. Hottenstein is one of the youngest superintendents in the state.

Mr. M. S. Hamm has been elected superintendent of schools at Roseburg, Ore., at an initial salary of \$2,600.

Herbert D. Bixby, principal of the East Technical High School, Cleveland, O., has been appointed assistant superintendent of schools in charge of elementary education. Mr. Bixby succeeds Miss Catherine T. Bryce, who has accepted an assistant professorship at Yale University.

Mr. H. E. Hendrix of Flagstaff, Ariz., has been elected superintendent of schools at Mesa, at a salary of \$4,600. Mr. Hendrix was formerly head of the training school of the Northern Arizona Normal School, and director of the summer school of the normal.

Mr. Clarence H. Dempsey has resigned as superintendent of the Haverhill, Mass., schools to take a similar position at Milton, Mass.

Superintendent Randall of the Auburn, Me., schools was reelected at a salary of \$3,500, with \$200 for maintenance of his automobile while doing school work.

Mr. Walter M. May, formerly high school inspector for the State Board of Education of New Hampshire, has been promoted to be deputy commissioner of education in charge of secondary schools. He takes the place of Mr. George H. Whitcher who resigned to become United States prohibition commissioner of New Hampshire.

Dr. J. O. Creager, president of the Northern Arizona normal school at Flagstaff, Ariz., has resigned.

Mr. Willard M. Whitman, superintendent of the Swampscott, Mass., schools was elected superintendent of the schools of Marquette, Mich.

Prof. Samuel Kline McDowell, who for the past five years was superintendent of the West

Aurora, Ill., schools, was unanimously elected as superintendent of the Bloomington city schools, at a salary of \$5,500 per year. He is the successor to Superintendent J. K. Stablon who tendered his resignation after a service of nineteen years.

Mr. R. J. McMahon, formerly superintendent of the Keweenaw, Wis., schools has been elected as head of the Shawano, Wis., schools.

Mr. Joel Jenifer has been elected superintendent of schools at Lewiston, Idaho, to succeed Mr. F. W. Simmonds who will enter the service of the United States Chamber of Commerce.

Superintendent Wm. Herald has been reelected as head of the West Branch, Mich., schools.

Mr. A. T. Stanforth, formerly superintendent of schools at New Cumberland, W. Va., has been elected as head of the Clay District Schools at Shinnston, W. Va., at a salary of \$3,200.

George L. Cole and Arvin Bunnell, both of Clarksville, Ind., a suburb of Jeffersonville, claim the presidency of the local school board. Mr. Bunnell called a meeting of the board early in the month, increased the pay of teachers and signed contracts. Mr. Cole has called a meeting for the coming week at which, he says, teachers for the coming year will be elected. Cole's term expires in August, but he was ousted, according to report, and Bunner, secretary of the board under Cole, assumed the presidency. There is also a fight over the secretaryship. It is said that the fight will be taken to the courts.

R. V. Bennett has been chosen as principal of the Lindsey-Wilson Training School at Columbia, Ky., for the coming school year.

Robert E. Woods, Louisville attorney and postmaster here from 1906 to 1912, announced a few days ago that he would be a candidate for election to the Board of Education in November, confirming rumors that have been current several days.

George N. Trumper has been reelected for the tenth year to the principalship of the Kenosha, Wis., High School at a salary of \$3,500, an increase of \$700 over last year. Principal Trumper has given much of his time to helping to organize the two Junior High Schools of Kenosha.

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The most important question before the schools of this country is that of adequate pay for the teachers. Teaching, a profession fully as important as those of the medicine and the law, must not be suffered to deteriorate.

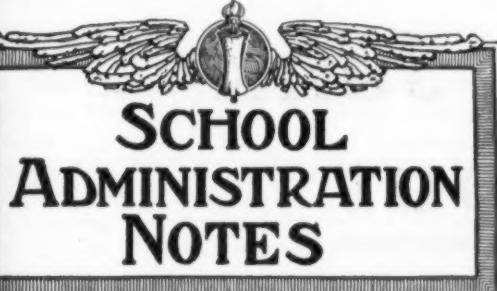
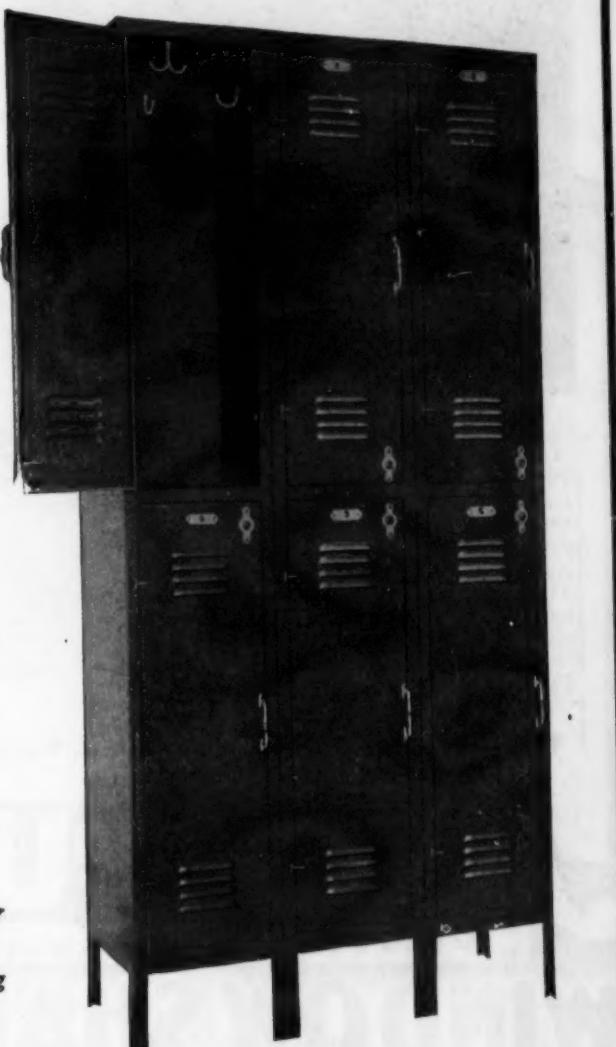
Equipment must be secondary. But it should be a matter of public pride to make the temple worthy of its high purpose, to be able to say without qualification that our schools are in every sense the best in the world.

Good schools deserve good equipment

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THE ANTI-TEACHING PROPAGANDA.

A high school principal recently wrote, "I cannot conscientiously recommend to the members of my graduating class that they adopt teaching as a profession," but during the war he did not hesitate to urge upon these same students their duty to their country. He passed on to them the call to make the supreme sacrifice if necessary, even under the horrible and terrifying conditions of trench warfare. The wealthy parents of a gifted child said: "The last thing in the world I want my girl to do is to teach." Are these sentiments indications of wisdom, or are they merely hysterical foolishness? In what field of vocational training will the boy and girl have more wholesome fun or a more enjoyable professional preparation than during the two years spent at the normal school or four years at a university? In what other vocation will two short years of special preparation yield not only a beginning salary of \$1,500 for ten months' work, six hours a day, five days a week, but an assured promotion for ability, pay steadily increasing with years of service, work supreme interest and enduring and a position commanding from the beginning social respect, protection and recognition? In what other walks of life are there equal opportunities to render under equally good working conditions public service absolutely vital in character? Of how many other professions can it be said that professional preparation is also a splendid preparation for parentage, for citizenship, for successful living of any type or character? What financial reward

can equal the privilege of studying, directing, serving children, "the most complex, the most plastic, the most potential, the most beautiful, the most wonderful of all of God's marvelous creations?" Let us be frank with ourselves and admit we have been barking up the wrong tree. Are schools less perfect than we desire? It is our duty and privilege to improve them. Are teaching conditions unsatisfactory? Then ours is the responsibility for making them better. Are the recruits to the teaching profession decreasing in number and deteriorating in quality? Then it is proof positive that we have betrayed our trust and cut off our noses to spite our faces. Every word we utter against the profession undermines by just so much our own standing and position. The instinct of self preservation alone should lead us to help and not to hinder.—*Frank Cody, In Detroit Educational Bulletin.*

TEACHERS' DECLARATION OF RIGHTS.

The New York City Teachers' Council reports that 98 per cent of the public school teachers have voted in favor of a "Declaration of Teachers' Rights." Out of 19,402 votes 19,003 indorsed the declaration.

The committee said in part: "We believe," that teachers have the same right to organize for greater efficiency, protection of rights, professional advancement, and adequate salaries as have other citizens, and to collect, by contributions or voluntary assessment, the funds necessary to support our organization. We also believe that any attempt to influence or control the lawful activities of teachers outside of the hours of employment is unwise, unjust, unnecessary and oppressive. We believe that our profession should be freed from the irritation of unintelligent law criticism, from the blight of politics in appointment or advancement, and from the numbering effect of official repression or to detail guidance."

SHELBYVILLE SALARY SCHEDULE.

Upon recommendation of Supt. J. W. Holton, the board of education of Shelbyville, Ind., has adopted the following salary schedule:

Class I—Minimum \$900. Annual increase \$75 until a maximum of \$1350 is reached.

Class II—Minimum \$1,000. Increase of \$75 until \$1450 is reached.

Class III—Minimum \$1125. Annual increase \$75 until a maximum of \$1575 is reached.

Class IV—Minimum \$1215. Annual increase \$100 until maximum of \$2,000 is reached.

The teachers in class I include such as have not two years professional training in a normal school. Instructors of special merit who were in the schools during the year 1919-1920 and who had reached the maximum salary have been advanced to class II.

Class II includes teachers who are graduates of a standard normal school and who have one year's teaching experience.

Class III includes instructors who have had three years of professional training and one year of successful experience.

Class IV is limited to teachers in the high school. They must be college graduates with one year's successful experience.

An additional \$25 per year will be given to all teachers who attend school during the summer, provided the maximum salary has not been reached.

SHOULD MENTION PENNSYLVANIA.

The front page cartoon of the June School Board Journal, depicting progress in continuations schools in several leading states fails to mention the State of Pennsylvania. This state has had a law in effect for the past five years which requires all children from 14 to 16 years of age to attend continuation school, not four, but eight hours each week.

San Francisco, Cal. At the end of the last school term, it was announced that fifteen of the twenty-five children of the Michelangelo Open-Air school were well enough to go back to the usual school routine. This announcement was made by Dr. Mary W. Harris, general secretary of the San Francisco Tuberculosis Association, she stated that the others will need a few more months of special "health education" before being returned to the regular grades. Dr. Harris states that the association and the Board of Education have demonstrated that a few dollars spent on each school child physically below par works a wonderful transformation.



Soft Light Promotes Hard Study

Protect the pupils from the harsh glare of direct sunlight—and watch grades climb. They'll study harder and learn more because their eyes are free from strain and they are able to concentrate.

Aerolux Shades transform sun-glare into a soft, diffused light. They admit the refreshing breeze but keep out the rain. Easy to adjust at top and bottom—hang straight without warping—easily cleaned. Will not whip in the wind.

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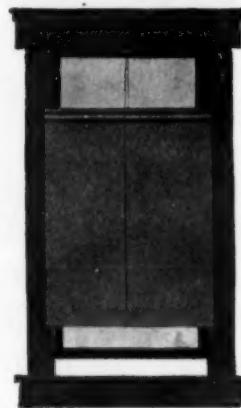


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Window shades are one of the most important items of every school's equipment. Protection against the sun's heat and glare, good reading light and proper ventilation are prime essentials to schoolroom efficiency and to the pupils' health.

In schools where a strong, durable shade is required, Draper's Adjustable Window Shades are indispensable. They permit perfect control over light and ventilation at all times—and are guaranteed to withstand the hard usage and abuse to which school property is subjected.

The mechanical construction is simple, positive in action and absolutely "fool-proof." The rollers, which are large and strong, are equipped with an oversized spring, which insures the rolling and carrying qualities of every Draper Shade.

Write for illustrated folder.

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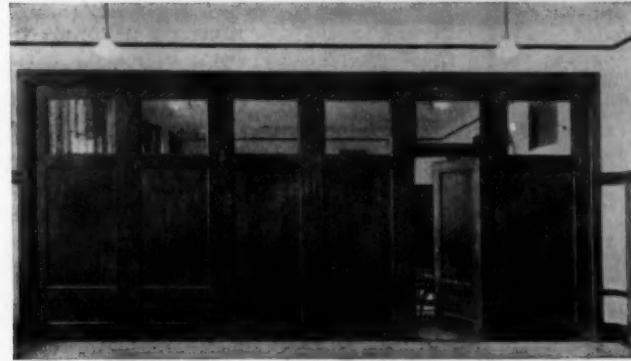
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A NORTH DAKOTA SURVEY.

(Concluded from Page 37)

but one. Here again the loss is obvious. Just about the time teachers have become acquainted with a community and thereby know how to serve it, they move on into another where they have to repeat the process of getting acquainted and learning how to adapt themselves and their work to the peculiar needs of the community. A reformation which would double the teacher's term of service and prolong her stay in a given community would be of incalculable value to the cause of education.

The survey's inquiry into the expenses of teachers threw into bold relief the urgent need for better salaries already referred to above. Teachers in rural schools are paid just \$25 more than they are required to spend; teachers in high school only \$16 more than they spend, while teachers in the graded schools have expenses which exceed their salaries by more than \$100 a year. It should be said in this connection that their expenditures are chiefly for the bare necessities of life, leaving very little for savings and luxuries.

The survey brought out also the interesting fact that teachers as a class are idealists. In reply to the two questions why they entered the profession and why they continued in it the teachers gave a variety of answers. But a large majority of them declared that they entered the profession and remained in it either because they liked the profession, or because they liked children, or both.

The findings of the survey committee were summarized, published and sent to all the teachers who participated in it. The facts it brought out respecting certain fundamental weaknesses in the administration of our public schools

ought to be more widely published in order that they might serve to arouse the public to a determination to improve these conditions.

TWO URBAN HIGH SCHOOLS.

(Concluded from Page 47)

can be given at the present time (August, 1920) but it can be stated that the proportion of floor space and cubic contents per pupil has been kept at the minimum, considering the numerous modern facilities which have been included and that the construction, equipment and design are as simple and inexpensive as is consistent with Wisconsin laws, the safety of occupants and the dignity of a building erected for the education, training and cultivation of American boys and girls.

THE GREAT EDUCATIONAL CONGRESS IN THE MOUNTAINS.

(Concluded from Page 34)

must be employed if desirable ends and purposes were not to be lost in a squabble over minor amendments and changes. If the charge of steam roller tactics is at all admissible it must also be said that the big audience approved them. Dr. Strayer sat behind President Josephine Corliss Preston and advised her on the parliamentary tangles that threatened the meeting.

Before the meeting adjourned Dr. Fred M. Hunter, the president-elect, was presented to the membership. He is a giant in physique and every inch a schoolmaster. "Let us show the world what the American schools can do for the cause of Democracy" was his slogan.

CONGRESS OF SCHOOL BOARDS.

(Concluded from Page 38)

principal, the supervisor of the school board. The teacher must play the part assigned to her.

The scholarship, professional spirit and the loyalty of the teacher must be recognized. The team work spirit must be fostered if harmony and efficiency are to be achieved.

SANITATION AND THE RURAL SCHOOL.

(Concluded from Page 41)

of pollution into the well from the feet of children who visit it. In wells of the dug variety it is usually advisable to relay the brick or stone in the upper six or eight feet of wall, making use in this of a rich cement mortar. This will keep mice, rats, moles, snakes and other small creatures from getting into the well when in search of water. A perfectly tight curb should cover the top.

No more effective sermon on the need of better sanitation can be preached in any rural community than the installation of sanitary toilets at the schoolhouse and the equipment of the well in the manner indicated. The screening of the schoolhouse will prove an object lesson to the children that many of them will remember all their lives. With sanitation at the schoolhouse taken care of, it may be expected that the teaching of fundamental truths in respect to these things will find fertile soil and bring forth results for good in due season.

Mr. Harry McGuire has been reelected superintendent of the Kiowa, Kans., public schools for another year at a salary of \$3,000.

The Kansas State Textbook Commission in April adopted high school textbooks for a period of five years. The average increase in cost to pupils amounts to 43 per cent over the books in use during the past five years. Approximately one-half the books are new works not previously used in Kansas schools.

Arthur L. Dailey has been reelected superintendent of schools at Richmond, Missouri. He has served as high principal three years and as superintendent for two years.



Telescopic Model B Overhead Crane manually operated. Lifts and lowers between basement and wagon without rehandling loads at sidewalk level. That part of Hoist shown TELESCOPIC below the sidewalk, or grade, when not in use.

NOW is the Time to Install a Modern Method of Ash Removal at Your School

YOU need not waste a lot of time and money in the ash and rubbish removal at your school this winter. Install a money-and-time-saving G&G Telescopic Hoist NOW—before the cold weather arrives. You will find—like hundreds of other schools throughout the country have—that the Hoist enables one or two men to perform this necessary work far BETTER, QUICKEER and QUIETER than five men ever performed it under the old laborious methods.

G&G Hoists are made in various models—electrical and manual—any of which can be installed in old or new buildings where there is an opening (preferably 4 ft. square but a smaller space can be used when necessary) in sidewalk, playground or alley. No need to excavate. Heel of Hoist rests on basement floor.



Open Hoistway is protected by automatically operating G&G Spring Guard Gates. Hoist is equipped with Automatic Gear Shifting Brake Device. Sidewalk doors OPEN AND LOCK AUTOMATICALLY—CLOSE AND LOCK AUTOMATICALLY—by turn of telescoping handle. Sidewalk doors rain-proof when closed.

We can show you how you can secure much better and quieter ash removal—at less cost—at YOUR school. Write us NOW, telling height of lift; quantity of ashes to be removed and how often; and whether cans are to be hoisted to sidewalk or high enough to dump directly into wagon alongside hoistway.

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THE TEACHERS' MISSION.

(Continued from Page 22)

petence with those who would remove them. This would certainly be true of two or more years of service in the same position. And it is such acts as this committed now here and there, that drive teachers in self-defense to organizing on the purely economic and political basis. Let school officers and school superintendents treat teachers as professionals and in return expect of them that they shall really be professionals.

OUT OF THE NOTE BOOK OF A COUNTRY SCHOOLMASTER.

(Continued from Page 28)

The Migration.

Three years ago, two young men named Mitchell and Davis came from the East and filed adjacent homesteads on the divide between Fish Creek and Bullberry Coulee. Like many newcomers they were city bred and knew little or nothing about dry farming. So after three years of unfruitful effort they decided to teach school thru the winter to tide them over.

Mitchell got the Fish Creek school and Davis was elected in Bullberry Coulee. The boys considered themselves lucky, for both of them worked close to their homesteads. They could get home on Saturday and keep their stock from straying off the range.

But neither of them got along well. I don't know what is wrong with these two districts but the people seem to be always fighting among themselves and with their teachers. This year was no exception. By Christmas Mitchell was ready to quit and Davis had been forced to resign.

But the boys had to get money for seed wheat so Mitchell went down and asked the trustees

in Bullberry Coulee for a job. About the same time Davis applied for the school on Fish Creek.

Both were hired. There were no other applications for either position, because there was a shortage of teachers in the county that year and these two schools had a bad reputation.

I can't see how the trustees of either place figured that they were helping things any, for all it really amounted to was that Fish Creek and Bullberry Coulee exchanged teachers.

For a time, however, there seemed to be a faint ray of hope that the new arrangement would be more satisfactory but now two months have passed and I have heard that the patrons have started kicking again.

A. S. Cook, New State Superintendent of Maryland.

The Maryland Board of Education on June 4th elected Albert S. Cook, State Superintendent of Schools for four years at an annual salary of \$8,000. Mr. Cook was formerly superintendent of schools for Baltimore County, having occupied that position for the past twenty years, during which time he had built up the county system to a high standard of efficiency. Prior to 1900 he was connected with the schools of Franklin county, Pa., Belair, Md., and Reisterstown, Md. Mr. Cook is a graduate of Princeton University and has done post-graduate work at Princeton and Columbia universities. He has lectured on rural school administration at Columbia, Harvard, University of Missouri, and Kansas State College of Agriculture.

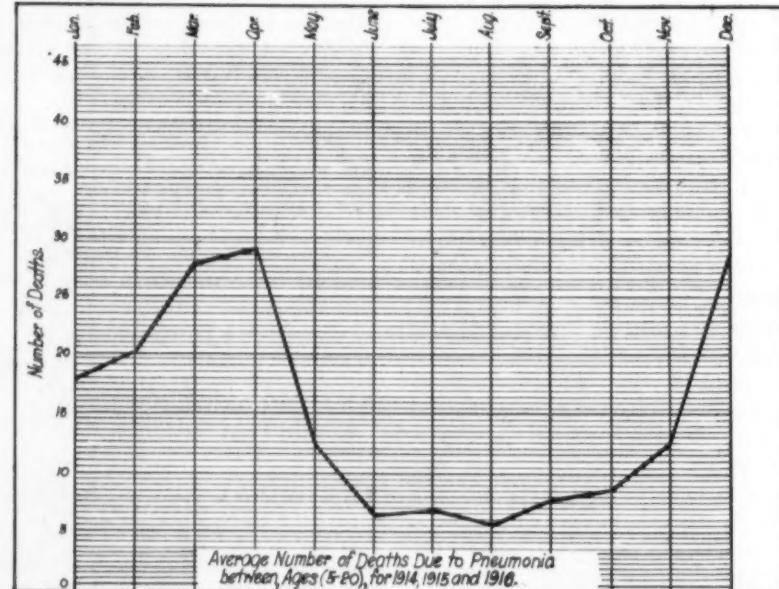


FIGURE 3. (See Page 27.)

THE HUDSON STUDY DESK



Why have the top of a school desk adjust and not the seat?

We contend that by adjusting the desk only the correct posture cannot be obtained if the seat does not adjust—and the back too. The Hudson seat adjust three inches (the top five inches) in the Large size and proportionately in the Medium and Small sizes. Besides the top adjusts to any position and the back adjusts vertically.



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consists of buying the right goods at the right time, rather than buying at a close price.

Purchasing agents of large corporations are alive to this fact. Their problem and yours is to have materials and supplies on hand when they are needed.

Requirements must be anticipated. Articles for use in the fall must be purchased now. Otherwise—disappointment.

This is an abnormal year in all branches of industry, particularly so in the school equipment branch. Were production normal, the increased demand would far exceed the supply. But production is lower than ever before—which means that many schools will be unable to secure equipment.

Is your school to be one of the many or are you going to do the wise thing—buy now?

We are in position to make prompt shipments now—but for how long we cannot say.

Columbia School Equipment Works

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Announcement

The Board of Directors of the Kewaunee Manufacturing Company announce the election of Mr. C. G. Campbell as a Director and General Manager of this Company. Mr. Campbell was for several years associated with us as Sales Manager.

The Directors also wish to announce that Mr. F. H. Wiese is no longer associated with the Kewaunee Manufacturing Company as General Manager and Secretary, or in any official capacity.

The Kewaunee Manufacturing Company, Kewaunee, Wisconsin, is not associated in any manner with any other manufacturer of laboratory furniture or equipment now operating or organizing.

We are in position to take care of the requirements of our trade and have ample facilities for making prompt shipment of our standard line and special equipment consistent with the time required to manufacture.

Thanking you for past patronage and the continuance of your business, we are

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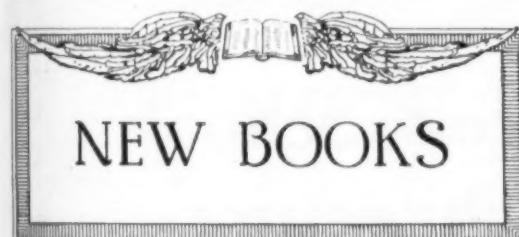
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An Index Number for State School Systems.

By Leonard P. Ayres. Cloth, octavo, 70 pages. Department of Education, Russell Sage Foundation, 130 East Twenty-Second Street, New York City.

This little volume has reduced the annual reports issued for the past fifty years by the United States Bureau of Education to comparative figures and percentages. The measurements applied to the several states are based upon school population, attendance, expenditure and educational results. Mr. Ayres explains how he arrives at results. His figures reflect "the diffusion, the amount and the quality of the education that the children are receiving," based on statistical data.

In view of the recent announcement by the Russell Sage Foundation of the standards attained by the several states, placing Montana at the head and South Carolina at the foot of the list, the little volume will prove of some interest.

Experimental Organic Chemistry.

By Augustus P. West. Cloth, xiii and 469 pages. Illustrated. World Book Company, Yonkers-on-Hudson, New York.

The possibilities and prospects of chemistry were never greater than at present. For years housewives have used empirically some principles of chemistry with excellent results. Farmers have long known that the cultivation of legumes enriches the soil. Now little packages of earth are sent to the nearest agricultural experiment station to find out what is needed. The late war has given a strong impetus to this subject, so that organic chemistry will undoubtedly receive more attention than it has had in the past.

This book has been prepared by a professor in the University of the Philippines. To many of us this has a remote sound. The publishers state that the textmatter has for a number of years before formal publication been supplied to students in mimeograph form and has successfully met the test of use in the classroom. It is of college grade a combination textbook and laboratory manual. Only the more important compounds are discussed; dangerous compounds are omitted. Experiments have been written in the most precise and accurate manner. The student is usually told exactly what to do and how to do it. What is not always the case, equations to explain the experiments are given. It is claimed these features make it possible to handle large classes and enable the student to think over and digest what he has learned. The book from introduction to index is marked by sound scholarship.

Everyday Arithmetic.

Revised Edition, by Franklin S. Hoyt and Harriet E. Peet. Intermediate. Cloth, 276 pages.

Everyday Arithmetic.

Advanced. Cloth, 326 pages.

This title expresses the aim of these authors and the scope of their books which are intensely practical, concerned with the greatest needs of the greatest number.

"Intermediate," intended for use in the fifth and sixth years, aims to develop skill in fundamental processes. To attain this end, tests or exercises in addition, subtraction, multiplication, division give such familiarity with certain combinations that accuracy and speed should result. House improvements, keeping a cash account, measuring surfaces, planning a trip, money value of an education, are but few of the practical topics on which mathematical work is based. Definitions are short and simple. Pictures, diagrams are in evidence.

The advanced book is to be used in the seventh and eighth grades, and reaches into the world of business, industry, civic affairs. Great care has been taken in putting practical conditions into all the work. Series of problems on one

topic are particularly interesting. "Short cuts" in work, independence of pencil are recommended. Reasoning is cultivated by sometimes requiring orally the steps in the solution of problems without doing the work. Starred problems are optional and meant for the bright section. Indeed, the needs of both the quick and the slow are remembered.

Junior Latin.

By John E. Forsythe and Richard M. Gummere. Book One. 12mo. Cloth, 135 pages, illustrated. Christopher Sower Co., Philadelphia.

Tho there is no royal road to learning a labor-saving foot-path may sometimes well be chosen.

This book, novel in its arrangement, plans fixing Latin forms and much of Roman history, while memory is bright and curiosity keen. In declension of nouns, case endings, with their quantity marks, are separated from their stems. Well memorized, this plan makes declension of nouns and adjectives intelligent, not mechanical. Critical study of verbs is deferred on the principle that one thing should be learned at a time and learned well. New words are often in groups having a kindred meaning. There is nothing vague or slipshod about the requirements for neatly arranging work.

Maps, full-page illustrations, information about Roman dress, greetings, water supply, ideas of creation, schools, religion, help to form a picture of the great nation that has bequeathed its ideas of law to modern Europe and has given directly to the English language nearly half its words.

Leading Facts of American History.

By David H. Montgomery. Cloth, 422 pages, illustrated. New Revised Edition. Ginn & Company, Boston, Mass.

Montgomery's history is not new. It is well known in schools thruout the land, and has served its purpose long and well. Its three characteristic virtues, consciousness, comprehensiveness and simplicity of wording have been duly recognized.

The publishers announce that this new revised edition may well be called the "After the War" edition, as it includes the nation's participation

(Concluded on Page 93)

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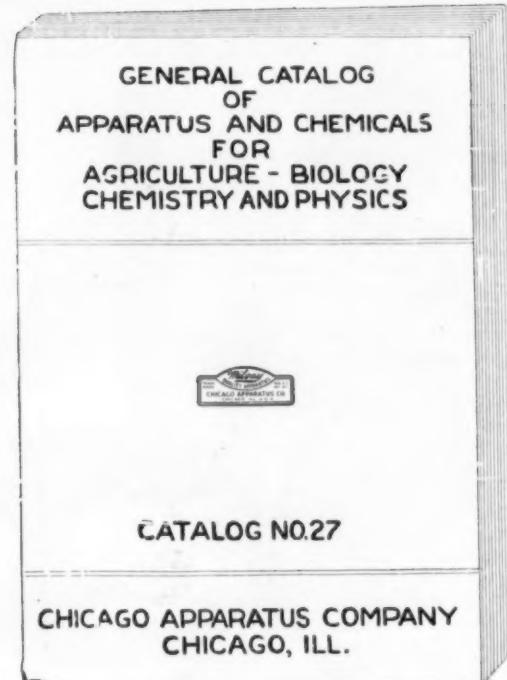
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(Concluded from Page 91)
in the world war and in the peace conference. In other words, the book has been brought up to date.

The book is provided with a colored frontispiece entitled the American Soldiers Saluting the Statue of Washington at Paris, July 4th, 1918. It is a copy of a painting by J. F. Bouchor the official painter to the French armies.

Rural Science Reader.

By S. B. McCready. Cloth, 324 pages, illustrated. D. C. Heath & Co., New York, Boston, Chicago.

This is the first volume in the Rural Education Series under the general editorship of Dr. Harold W. Foght, recently chief of the Rural Division of the United States Bureau of Education.

A wide range of subjects is found in these highly readable chapters, each one relating in some way to the betterment of home, school, rural community life. Chapters on the home, the farm, the old settlers, the neighborhood, are followed by those on school gardens, noon-day lunches, the potato contest, weeds, the making of a school library, school credits for home work and many others. A pupil tells each story. A teacher, gifted with tact, is usually the leader, in each new venture. Questions at the end of each chapter are intended to lead a constructive work. Both the stories and the constructive work show how varied and rich are the interests and opportunities of rural life.

Standard Educational Tests.

M. E. Haggerty. 58 pages. Sigma 1, and Intelligence Examinations; Delta 1 and Delta 2. World Book Co., Yonkers, N. Y.

Two of the exclusive features of these educational tests are: (1) they can be given in thirty minutes; (2) they are suitable to pupils of different ages and conditions. Among the special advantages are: (1) they are based on the best of army tests; (2) they can be used by the average teacher to increase the efficiency of her work; (3) they can test an entire class at once; (4) they have clever scoring keys which make the answers right or wrong.

Teachers need some definite training, but by following the sensible directions in the manual, a group of teachers can be made efficient. There should also be preliminary practice before a teacher tries her hand upon a class of pupils. Difficult and complicated cases require an expert psychologist. Perhaps a great merit of this system of tests is that a relatively small expenditure of time and effort gives large returns.

Selling Your Services.

By George Conover Pearson. Cloth, 237 pages. Jordan-Goodwin Corporation, Jefferson Bank Building, New York, N. Y.

John Caldwell, a master salesman, finding himself out of a job on his return from the army, conducted a carefully planned, carefully executed campaign and was so successful in finding the right kind of work for himself that he was later asked to teach a class in re-employment. In these talks to a large and interested group of listeners, he brought out the points of a good letter of application, of a followup letter, of a personal interview, of direct address, of personal appearance. A number of possibilities should be carried at one time. The business world should be studied for openings into which the ability and experience of the one seeking employment may fit. One should always make a good, steady job of getting a job.

Nonsense Rhymes and Animal Stories.

By Alhambra G. Deming. Cloth, 64 pages, illustrated. Beckley-Cardy Co., Chicago.

We have read over and over again that drill must be given "the one hundred demons" to make poor spellers good spellers. Now we read that "there are only twenty or thirty errors in grammar that persistently occur." To correct these errors our author has devised an attractive game.

An elephant whose English may fairly be called faulty talks in turn with birds, beasts, fish and fowls. In the course of each bit of talk he is corrected for some gross violation of the King's English. Finally, the frog advised him to go to an elephant school to learn to speak so he would not be laughed at. The elephant went, learned to

speak correctly, came back to be admired and quoted. Three short stories in which the animals speak correctly carry out the same idea.

TEXTBOOK NEWS.

The constitutionality of the Illinois law regulating price of textbooks was attacked July 13 by Scribner's Sons in a suit filed in United States District Court against the board of education of La Grange, and Francis G. Blair, superintendent of public instruction in Illinois. An order restraining the defendants from enforcing the law is asked in the bill.

The suit is regarded as a test because a decision will affect every school district in Illinois. The law passed in 1917 compels corporations selling textbooks to submit price lists at which they would sell books for a five-year period. A provision in the law made it unlawful to sell the books at prices exceeding a 15 per cent advance.

In the bill Chas. Scribner's Sons claim that since 1917 there has been an increase in cost of labor and materials ranging from 100 to 600 per cent. "This," the bill states, "has wiped out all profits from the sale of books and to continue selling at the old prices would involve at least a loss and possibly drive the firm into bankruptcy."

A prices list submitted by the plaintiff showed the following increases:

	1916	1920
Paper	7.25 cents pound	14.5 cents
Cloth	18.5 cents yard	47 cents
Thread	85 cents pound	\$5.20

On June 21 notice was given that the old prices were withdrawn and that the company would refuse to supply books at the old price. In reply Mr. Blair notified Scribner's that they must conform with the law.

The Indiana State Board of Education has ruled that public schools in the state must use the state adopted copybooks. A Fort Wayne firm which publishes the books, had complained to the authorities that the schools were not using them.

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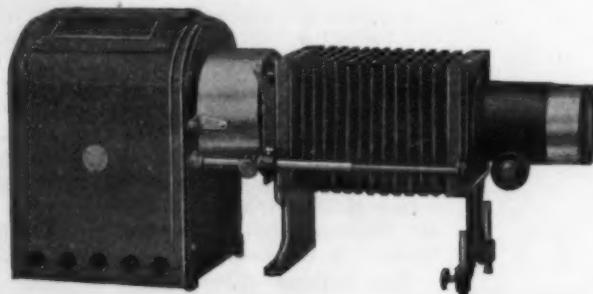
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Los Angeles School Bonds Carry.

School bonds totaling \$9,500,000 carried at a special election held in Los Angeles June 8. The Board of Education plans to spend \$6,000,000 for new elementary schools and \$3,500,000 for high school buildings to overcome existing crowded conditions.

The money must all be expended for buildings, sites, equipment and other such additions to the school department's physical property.

The money was needed to relieve intolerable overcrowding, to do away with many unsafe buildings, to avert the necessity of half-day sessions and waiting lists, improve sanitation and for similar purposes.

To arouse the people of the city to a realization of the vital need for approving the school bond issue which was voted on, thousands of Los Angeles school children participated in a parade thru the down town streets on June 7. Thru the use of elaborate floats, banners and placards, the crowded condition of the classroom was brought to the attention of the public and a strong pictorial appeal was made for the money that is urgently needed to build new schoolhouses and provide additional equipment.

The procession was headed by Superintendent of Schools, Dorsey and her staff, and by members of the school board.

Several floats emphasized the need for additional buildings by showing the temporary structures now being used to house classes. "The Old Woman Who Lived in a Shoe," did her bit, also to emphasize the conditions now existing at Los Angeles, and a number of the entries were miniature schoolhouses constructed on trucks and showing the crowded rooms. One float bore the legend, "400 per cent increase in attendance in five years without the expenditure of a dollar."

All the schools of the city were represented in the parade. The high schools, besides having their military units on display, entered floats and a large number of automobiles filled with girls. The column was in charge of Grand Marshal J. C. Reinhard, principal of the West Vernon Avenue school.

One of the most effective displays was that by the pupils of the Woodcrest school, in which some 200 children, appropriately costumed, took part. The little marchers carried banners inscribed with pertinent sentiments. The music was supplied by the Boy Scout Drum Corps and two cornetists.

Some of the floats carried in the parade showed the work of Americanization carried on thru the schools in districts largely peopled by Japanese, Russians, Mexicans, and other foreigners.

State Faces Shortage of Teachers.

California will have to get back to the principle that money for schools should be raised where wealth is and distributed where children are before the problem of teacher shortage will be solved, declared Will C. Wood, State Superintendent of Public Instruction.

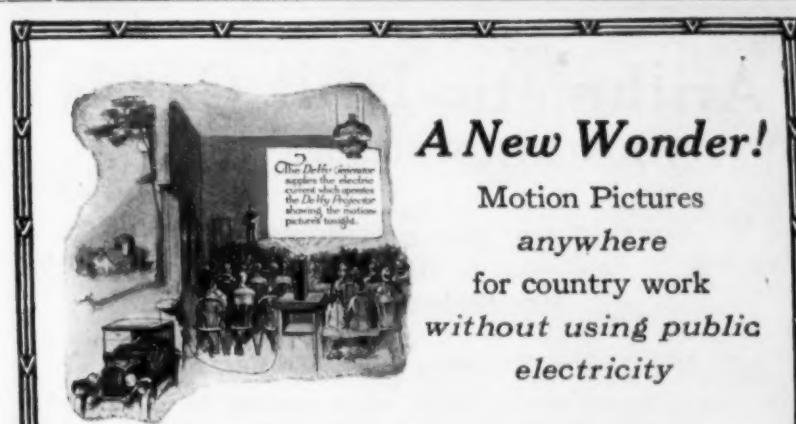
Unless something unforeseen happens, he asserted, the State will face a shortage of from 1,000 to 1,200 teachers when schools open next fall. The only hope this year lies in an increase in the county tax rates for schools, he added.

"This shortage will be felt most keenly in the small rural districts," he said. "During the present year we have had great difficulty in finding teachers for these districts on account of the meager salaries."

"Reports received recently from county superintendents of schools show that 128 districts in the State will lapse or be suspended at the close of this year. Twenty-three districts have been closed, because of failure to get teachers. In some instances the vacancies have been filled by the employment of teachers who were aged and infirm.

"Thirty-five counties report difficulty in obtaining teachers and practically every county anticipates difficulty next year. Most of the counties report that the Boards of Supervisors will levy the limit allowed by law, which is 50 cents on each \$100 as assessed valuation. Even this increase will be inadequate."

Superintendent Wood expressed the belief that schools must look to the state treasury for substantial aid for elementary education in order to solve the problem. He explained that many of



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the counties, especially those in the mountain regions, are now taxed to the limit, while mines are closed and production is at a low ebb.

Administration Notes.

Prof. George Colvin, Kentucky State Superintendent of Public Instruction has issued a statement in which he says that while there is a serious shortage of teachers in some counties, the result of the latest teachers' examination coupled with the discovery that some counties have a surplus of teachers, affords hope that the situation this year will be greatly improved over the last two years. He sent questionnaires to all County Superintendents and is trying to make the State department a clearing house for the counties, getting those that are short in touch with extra teachers in the more fortunate counties.

A deficiency appropriation of \$100,000 to be distributed among the seven State Normal schools of California to increase the pay of teachers, was approved on June 8 by Governor William D. Stephens and the state board of control. Teachers are now receiving from \$1800 to \$2400 a year, and the increase will amount to about 20 per cent, it was said. Decision was reached after a conference at Sacramento of normal school presidents.

The annual meeting of the California High School Teachers' Association was held at Berkeley June 29, 30, July 1. For the first time in its history the association met in Los Angeles, holding the opening session at Millsbaugh Hall Auditorium, on the campus of the State University, southern branch, on June 28. At the close of the day's exercises the delegates took the evening train for Berkeley where the remaining sessions were held.

The main theme for the first day of the convention at Berkeley, was administrative problems. On the second day standardization of high school courses of study occupied the attention of the teachers, and on the last day school finances were discussed. A. C. Olney, State Commissioner of Secondary Education, in an address at the second day session declared that high school methods are a disgraceful "hodge-podge."

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Brick: How to Build and Estimate. By William Carver. Paper, $8\frac{1}{2}$ inches by 11 inches. Issued by the Common Brick Manufacturers' Association, Chicago, Ill. The present pamphlet has been issued as a means of presenting the salient facts regarding the cost of solid brick construction, and the economy of brick construction. Advantages claimed for brick construction, are

protection against fire, decay and depreciation and the conservation of the supply of lumber.

De-Americanizing Young America. Poisoning the sources of our national history and traditions. By Edward F. McSweeney, Framingham, Mass. A reprint of a lecture on "Some Aspects of Americanization" delivered by the author before the Massachusetts University Extension Division at the State House. Contains an account of the statements of public men and references from textbooks dealing with the propaganda in favor of a proposed American-British Union. The author in a brief statement quotes from a personal letter of a governor: "We cannot be too insistent upon the ideals which have made America great or too emphatic in teaching the children in the schools and the immigrants who have recently come, to respect and honor the government under which they live."

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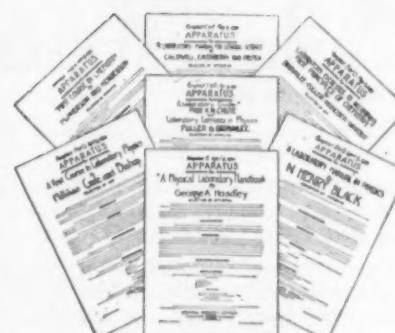
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Mr. Nathan Behrin creates new world's record on court testimony—writing 334 words gross, and 322 words net, a minute, and made but three errors.

At the Forty-fourth Annual Convention of the New York State Shorthand Reporters' Association December 30, 1919, Mr. Nathan Behrin created a new World's Record in shorthand, by writing 334 words gross and 322 words net, a minute. The contest which was held under the auspices of the Certified Shorthand Reporters' Society, had been given wide publicity and was open to all, and writers of all the leading systems competed.

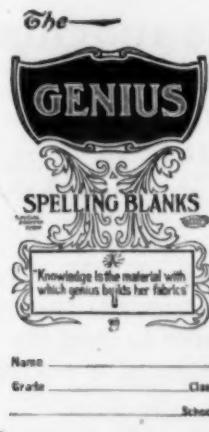
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*Formerly Director of Vocational Classes, Department of Engineering Extension, Iowa State College, Ames, Iowa.
 Now Federal Agent for Industrial Education, stationed at Indianapolis, Ind.*

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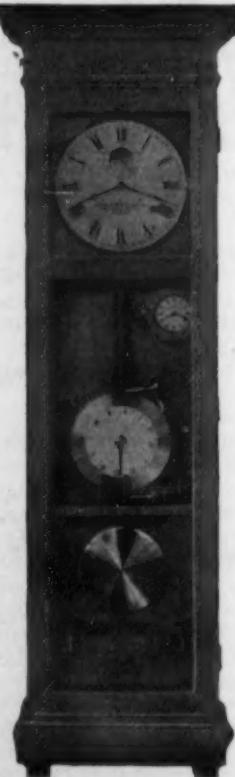
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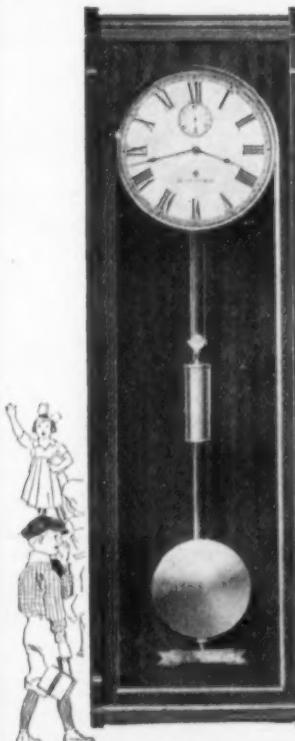
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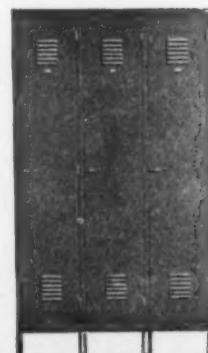
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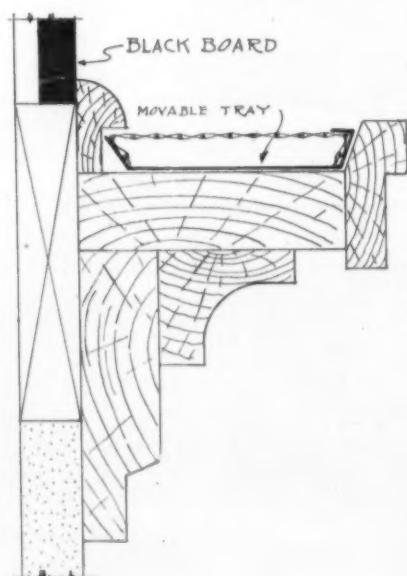
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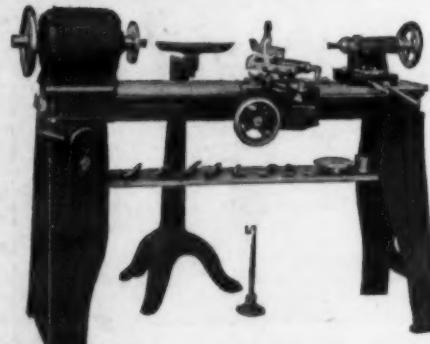
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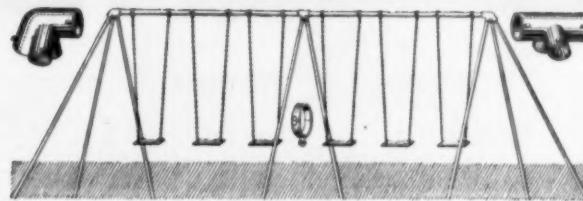
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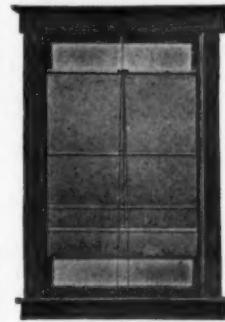
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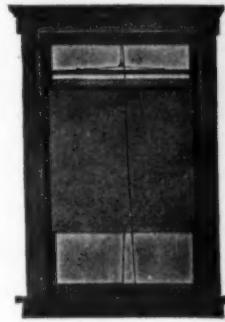
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We also manufacture a complete line of Disinfectants, Soap Powders, Paper Towels, Toilet Paper, Mops, Liquid Soap Dispensers, Paper Towel Holders, etc. Get our prices.

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Member, National School Supply Association

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The Safest
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Time is Here

the opportune time for making improvements. You are surely going to erect a modern fire escape this year—a fire escape that can be absolutely depended upon in time of need, that will quickly clear out the school rooms when fire, the danger of which is ever imminent, envelops the school in its fiery grasp and, if proper provisions have not been made, leaves death or maimed and crippled children as a remembrance of its presence.

You will agree with us that there is one time when dollars and cents don't count, and that is when the safety and lives of our children are concerned.

If we get busy right away, a

STANDARD SPIRAL FIRE ESCAPE

can be installed during the remainder of the vacation period and be in readiness for the opening of the fall term of school.

Write for full description and free estimate of cost of a Standard Spiral Fire Escape—give floor heights. ACT TODAY.

Standard Conveyor Company

NORTH ST. PAUL, MINN.

Chicago
549 W. WashingtonNew York
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606 Security Bldg.Representatives in all
principal cities.

Installation of open Spiral
Fire Escape at St. Aemilian's
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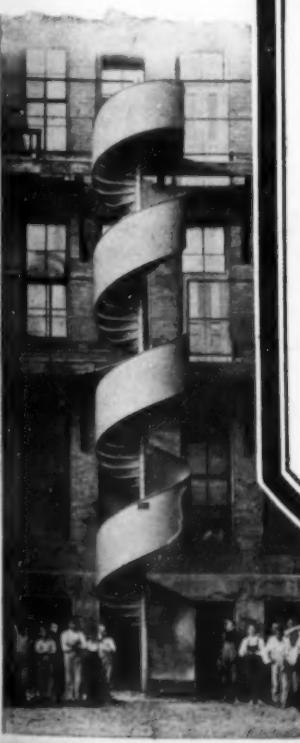


Illustration of open Spiral Fire Escape at St. Aemilian's Orphan Asylum, St. Francis, Wis.



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STERLING

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Double Warp All Wool Bunting

A Flag of sterling
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A Flag that bids defiance
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*The Problem of Safe and
Sanitary Heating and
Ventilation of School
Wagons is Solved.*



THE MILLER VEHICLE HEATER Does the Work

The above cut shows the Miller Vehicle Heater in use on a modern school wagon under actual winter conditions.

No stove to overturn, no gas or oil to explode, no smoke or poisonous gas to endure. Simply a hot air register in the floor flooding the whole inside of the wagon with warm, pure air drawn from outside.

Disease is now sweeping over the country endangering the lives of young and old alike. The epidemic of Spanish Influenza finds an inviting field for its deadly work in crowds, in damp, cold atmosphere, in poor ventilation.

The Miller Vehicle Heater, like mingled sunshine and fresh air, dispels dampness and disease, affords warmth and comfort, and renders safe and sanitary the journey to and from school.

Every parent has a moral right to demand and it is the sacred duty of school officers to supply Miller Vehicle Heaters for school wagons.

We manufacture and sell Heaters only and sell to wagon manufacturers, dealers and school authorities.

Send for Prices.

MILLER VEHICLE HEATER CO.

Crawfordsville, Ind., U. S. A.

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Chalk Talks

WE make just one article, Dustless Blackboard Crayon, and we make it so good that when once tried it means a satisfied customer. Why not get acquainted with the superior merits of **National Dustless Crayon**? Note their easy writing and erasing qualities. They do not drag, but write with a velvety smoothness.

Write for a dozen samples and compare them with any blackboard crayon made and satisfy yourself that you need **National Dustless Crayon**.

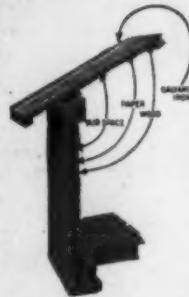
Your dealer is waiting to fill your future orders.

THE NATIONAL CRAYON COMPANY
WEST CHESTER, PA.



The **ARMSTRONG SECTIONAL SCHOOL BUILDINGS** are complete in every detail, having double floors, double side walls and ceilings. With every modern convenience makes them the best **Portable School Buildings** on the market today. With the perfect lighting and ventilation, they are without equal. Our buildings can be taken down and moved to another location without mutilating in the least any of the parts. We can prove it. If you write us what you desire, we will send you full details. We are specialists in Sectional School construction.

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Are Warm in Winter and Cool in Summer

We are equipped to furnish any size building on short notice. Prices of same depend on requirements and State Laws—but in every case are the lowest for quality of material supplied. Remember, this is not a cut lumber proposition, and the cost of erecting is a very small item. While not essential, as any unskilled labor can do it, we will, if you desire, arrange to erect all buildings. Buildings can be taken down and re-erected any number of times without marring a single feature.

We have made portable school houses for other people for over 25 years. Now you can buy Bossert School Houses with all our new patents and improvements direct from us and save money for your school board.

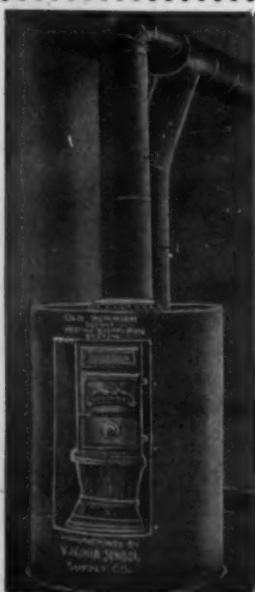
Write us full requirements and we will send details of cost of building completely erected.

LOUIS BOSSERT & SONS, Inc.

Builders of School Houses for over 25 years.

1323 Grand Street

Brooklyn, N. Y.



Protect the Health of the Children

If the children in the classroom should be bright and cheery the heat must be uniform and the ventilation just right.

Heating and Ventilation are two important factors in the school room. If the air in the schoolroom is foul and ventilation poor, disease is almost inevitable.

OLD DOMINION PATENT HEATING AND VENTILATING SYSTEM

will keep the room fresh with pure air yet warm and comfortable.

No separate independent foul air ducts or flues made of brick or metal are required. It is easy to set up and regulate and will not clog with soot or rot out. Every part is combined and all stove and ventilating pipes up to five feet are furnished.

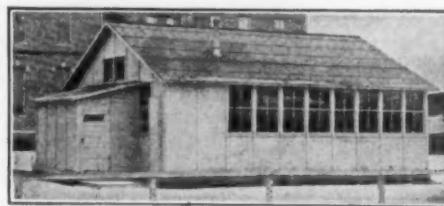
Our descriptive catalog gives full information and will be sent upon request.

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BLACK BOARD

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N. Y. Silicate Book Slate Co.
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Sectional, Portable School Houses

WHY NOT GET THE BEST?
Average Cost \$1000 per Room.
F. O. B. YOUR CITY.

School Boards in 35 states are using our houses. Let us refer you to customers in your state.
WE GUARANTEE OUR

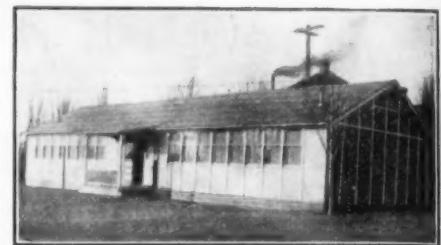
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to be dry, warm and sanitary, thoroughly insulated, well ventilated and with double walls. Sold in any size, open air and two rooms when desired.

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The Smith System of Heating and Ventilation

Especially Adapted to Portable Schools.

Gives the most perfect heat distribution and greatest amount of ventilation with the least amount of Fuel.

More than 30,000 Schoolrooms are equipped with it.

In use in most of the Leading Cities.

Write for Catalog.

Smith System Heating Company
Minneapolis, Minn.

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TRADE NAME REGISTERED

School Heater and Ventilator

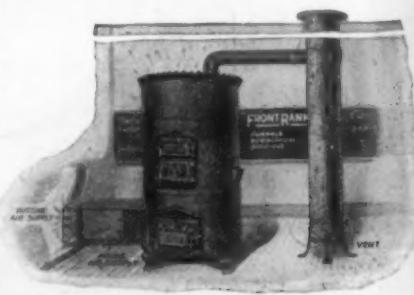
will not only assure more comfort and better health for both pupils and teacher in your school; it will

Save Your Fuel

and repair bills, and run satisfactorily with a very minimum of attention and trouble. The best schools are installing the **FRONT RANK**. Get in line.

If your dealer doesn't handle the **FRONT RANK** write for illustrated literature.

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In order to meet the present emergency, we have again enlarged our facilities, and we are better prepared than ever before to render professional service to school boards seeking superintendents and to superintendents seeking teachers. With our affiliated Agencies we cover the entire country.

FISK TEACHERS' AGENCY

E. E. OLP, Manager

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COLLEGE GRADUATES **RECOMMENDED EXCLUSIVELY** — (vocational teachers excepted). No grade school positions. Anything from high school up. Leading bureau for teachers of Commercial, Industrial, and Physical Education. Established 18 years. Covers all states. For a teacher or a position, tell us your needs.

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OF THE EDUCATIONAL FIELD.

RECOMMENDS capable teachers for school and college positions. Considers official vacancies only. Schools wanting teachers and teachers wanting positions should write to us. WE CAN BRING YOU TOGETHER.

W. J. HAWKINS, Manager.

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NEW YORK WANTS YOU

On April 24, the legislature voted THIRTY MILLION DOLLARS for additions to the present salaries of school teachers, giving

\$400 TO \$600 INCREASE

next year over the large salaries this year. This makes New York state salaries the largest in the world. New York wants 2,000 teachers from other states fit to earn them. Liberal recognition of credentials. Write at once.

SCHOOL BULLETIN AGENCY, - C. W. Bardeen, Syracuse, N. Y.

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We will help you get a position. We will help fill your vacancies. We make absolutely no charge for our services. If you want additional information, please write us.

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All communications answered the day received. Services free to school officials. Membership free to teachers. Wire or write for teachers or positions. O. F. Revercomb, Mgr. DENVER, COLORADO and NEW YORK LIFE BLDG., KANSAS CITY, MO.

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Personal Inspection of Instructors in the classroom one of the many distinguishing features of our service. Educators-Bulletin sent free to School Officials on request.

Southern Teachers' Agency 1. New System registering and nominating, doubling efficiency.
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Organized 1901. CONSERVATIVE MANAGEMENT. INTELLIGENT EFFORT.
ENJOYS CONFIDENCE OF INSTRUCTORS AND OFFICIALS.

PARKER TEACHERS' AGENCY

Eighteen Years of Real Service
to School Boards
12 South Carroll Street
MADISON, WISCONSIN

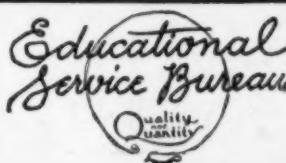
WANTED—POSITIONS FOR TEACHERS

Also teachers for positions. Teachers furnished free, full records of candidates. Write us your needs. OSWEGO TEACHERS' AGENCY, Box B, Oswego, N. Y.

WE SPECIALIZE IN BRAINS

personality and teaching power. OUR EIGHTH YEAR OF RECOMMENDING ONLY WHEN ASKED TO DO SO BY SUPERINTENDENTS OR SCHOOL OFFICIALS. More than two-thirds of all the Higher Institutions as well as the best Secondary schools in forty-four States and four foreign countries used our service the past season. Just moved into much larger offices equipped with every known device to fill vacancies from Kindergarten to University. A DISTINCTIVE SERVICE for Educators who appreciate ethical standards.

THE WESTERN REFERENCE & BOND ASS'N, Inc.
Department of Education, 699 Journal Building, Kansas City, Mo.



Three Classes of Teachers Who Should
Enroll in Our Agency

- 1—Those who desire a better locality.
- 2—Those who want a better salary.
- 3—Those who possess average or more than average ability. Write Manager C. E. White for booklet.

EDUCATIONAL SERVICE BUREAU
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WESTERN TEACHERS' EXCHANGE

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Gas & Electric Building Peoples Gas Building The Plymouth Building Berkeley Bank Building

Free Enrollment—All Offices
We Render Efficient Service To School Boards and Teachers
The Only Agency That Maintains Educational Men Constantly in the Field

The Pratt Teachers' Agency

No. 70 FIFTH AVENUE, NEW YORK

RECEIVES calls at all seasons for college and normal graduates, specialists, and other teachers in colleges, public and private schools, in all parts of the country. Advises parents about schools.

WM. O. PRATT, Manager

NORTHERN TEACHERS' AGENCY

650 Northern Pacific Avenue
FARGO, N. D.

A demand for teachers in this northwest is constant. Very good wages are being offered. You should investigate. Write today for further information.

W. L. STOCKWELL, President
8 years State Supt.

MRS. MATTIE M. DAVIS, Manager
14 years County Supt.

Teachers Wanted: For High Schools—Salaries for men from \$1500 to \$2800; for women \$1000 to \$2200; Grade Teachers—Either Normal School or College Graduates \$100 to \$220 per month. We represent the best paying schools in the country who have long been our clients. Send for free booklet.

THE ALBERT TEACHERS' AGENCY,
25 E. Jackson Boulevard, Chicago. Other Offices—New York, Denver, Spokane.

ALBANY TEACHERS' AGENCY, Inc.

81 Chapel Street
ALBANY, N. Y.

PROVIDES SCHOOLS AND COLLEGES WITH COMPETENT TEACHERS.
ASSISTS TEACHERS IN SECURING POSITIONS

HARLAN P. FRENCH, Pres. and Treas. W. W. ANDREWS, Secretary

THE COLORADO TEACHERS' AGENCY

303-304 Kittredge Bldg., Denver, Colorado

Twenty-five years' successful service in behalf of teachers and school officials.

We operate in all Western States. REGISTER NOW.

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The Acme Teachers' Agency

Uses unique methods
that eliminate trouble and
worry in selecting teachers.
Make your calls for teachers on its Manager, A. C. Whitehead, 1131 Healey Bldg., Atlanta, Ga.

SCHERMERHORN TEACHERS' AGENCY

Est. 1885
366 Fifth Ave., between 34th and 35th Streets, NEW YORK

CHARLES W. MULFORD, Prep. A superior agency for superior people. We register only reliable candidates. Services free to school officials.

Boyer's TEACHERS' Agency

Established to
Solve the
"TEACHER
PROBLEM"

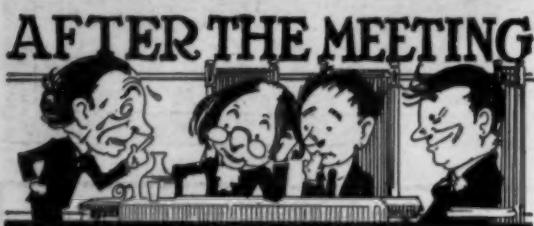
10600 Euclid Avenue, Cleveland, Ohio

Write for Information S. R. BOYER, Manager Telephone: Garfield 9323

The West Needs Teachers

FOR A TEACHER OR POSITION, WRITE OR WIRE
Cline Teachers' Agency

Columbia, Mo. San Diego, Calif. Chicago, Ill.
Arthur B. Cline, Mgr. 312 Owl Bldg. 6128 University Ave.
Boise, Id. Wynne S. Staley, Mgr. M. F. Ford, Mgr.
Geo. F. Gorow, Mgr.



The Natural Inference.

An eastern educator who has been spending considerable time in conducting institutes and in giving popular lectures, had an experience some time ago that shocked him considerably. He was asked to make a brief address at a hospital for mental diseases and accepted.

His audience consisted of the nurses, physicians, caretakers and a number of the inmates. He was getting along splendidly when suddenly one of the audience, a fine looking, elderly gentleman, arose and remarked in a loud voice: "This speech is rotten; it is the worst speech I ever heard." To say the least, the educator was nonplussed. He stopped and turning to the superintendent of the institution who had introduced him, he asked, "What shall I do; shall I stop?"

"No, go ahead," said the superintendent in a kindly way. "That man has only one intelligent interval every five years."

The Ambitious Farm Boy.

The county agent met this farmer at a corn contest meeting in the consolidated school. He said:

"You ought to make your boy interested in the dairy business by giving him a calf."

"Humph! I gave him a calf, then another one, and a cow of his own, and a half acre of ground and the use of my truck and fifty dollars to start him a crop and now what do you suppose he wants? Says he just can't get along nowhere without a silo, a barn, and a tractor painted red with gold stripes!"

Foresight.

"Did you punish the lad who drew the disrespectful picture of you?"

"Certainly not," replied the teacher. "Why should I deliberately offend a young man who is likely to attain wealth and influence as a comic supplement-artist?"

Handicapped.

"You say you're so good. Why didn't you enter the broad jump?"

"Rules didn't suit me."

"Why not?"

"They wanted to start us off with a pistol shot, and I do my best jumping when I hear an auto horn."

Teachers' Salaries.

There are salaries that make us happy,
There are salaries that make us blue,
There are salaries that fade before expenses

As the sunshine steals away the dew.

There are salaries with legal-tender meaning,
Which the eyes of credit sure can see,
But the salary which fills my soul with gladness,
Is the salary that's promised me.

—Wis. Journal of Education.

Heard at the N. E. A.

First Superintendent — She's a wonder, that quiet little teacher over there.

Second Superintendent — Why what has she done?

First Superintendent — I told you; she's quiet.

An Irish Solution.

Professor — "Pat, tell me, now, what is your solution to the world problem?"

Pat — "Well, sor, I think we should have a world democracy—with an Irishman for king!"—Life.

Superfluous.

"What's that you're goin' to give Bill?"

"An anaesthetic. After he takes it he won't know anything."

"Lor', Bill don't need that, he don't know anything now."—Boston Transcript.

No Hurry.

A Scotch schoolmaster one misty evening fell into a deep mudhole by the roadside and when he could not climb out, shouted for help.

A passing young man whose memories of his school days were still fresh and perhaps unpleasant, heard the shouts and asked who he was. Then he remarked calmly:

"Weel, weel, dominie, ye needna make sic a noise. Ye'll no be needed afore Monday mornin', an this is only Friday nicht."

HIS GIRL.

Frances Wright Turner.

Most every night when we're at tea,
Sam says to sister Sue,
"Did you notice Margie's freckles?
And she's lost her front teeth too."
You see, they think they'll tease me,
'Cause every single day
I take her books and slate to school,
—I meet her on the way—

When she gets down behind the bend,
She goes as slow—as slow,
An' if I sometimes get there first,
I do the same you know.
An' when we're in the spellin' line,
Why she stands next to me,
So when I go to spell it wrong,
She whispers "S, not C."

The reason why she tells me—is—
"Cause if I spell it wrong,
I have to go below, you see,
An' can't stand by her long.
She's got pink dresses and blue eyes
An' gee; the brownest hair,
I don't mind just two front teeth gone,
'Cause I like her BEST—so there!

But one time we got awful mad,
I said—"I just HATE girls."
And I threw down her books and slate,
An' SHE stamped, an' shook her curls,
She made an awful face at me,
An' stuck her tongue out too,
An' said—"you're just the meanest thing!
I guess I hate YOU too."

But after school, when I went home,
A feelin' awful bad,
I heard her come a'runnin',
An' you bet, that I was glad,
But I kep' goin' right along,
An' never made a sign,
Till she came up all out'er breath
An' slipped her hand in mine.

"O I heard an awful, awful noise,
Back in the hollow there,
An' I'm so scared—I thought—
Perhaps—I'm SURE—it was a bear."
An' then when she looked up at me,
With eyes so big and blue,
Why 'cause I did the very thing
That any feller'd do.

An' they can say she's "freckled,"
And "lost a tooth or two,"
But she's my best girl, just the same,
An' I'm goin' to keep her too,
So when Sam winks at sister,
And sister laughs at Jack,
Why, I don't care a single bit,
'Cause I've got Margie back.



"Fifteen dollars a week fer teachin' school?
It's a darn shame! They oughta give ya eighteen or twenty dollars. Why, I'm gettin' forty dollars down to th' fact'ry."—Life.

BUYERS' NEWS COLUMN

A NEW MOTOR-DRIVEN HAND PLANER.

The Oliver Machinery Company of Grand Rapids, Mich., has just put on the market a new direct-coupled, motor-driven, ball-bearing hand planer and jointer. The new machine is an improved type of jointer permitting the use of any current motor with speed of approximately 3600 R. P. M. It is adapted for either direct current or alternating current, and for one, two or three-phase in various voltages.

The machine has all the advantages of the No. 166 ball bearing jointer and eliminates bothersome belting and the dangers of belting. It saves floor space and operates at greater efficiency because of less bearings and absence of belting.

The machine has three high speed knives of the Oliver round or safety type and is equipped for especially smooth work in cabinet making, pattern making and furniture construction where smooth and accurate joint cutting is essential.

Information concerning the motor-driven, ball-bearing jointer and planer may be obtained by addressing the Oliver Machinery Company at Grand Rapids, Mich.

A CATALOG OF BUBBLING FOUNTAINS.

When the average schoolman has his attention called to something "new" in school drinking fountains he is likely to shrug his shoulders and suggest that the newness of the device very likely consists in a minor change of the nozzle and that it is merely a new selling point. So many new school fountains produced and marketed had talking points in their favor rather than genuine improvements, that the schoolman has become skeptical.

There is, however, something decidedly new in drinking fountains in the shape of a specially designed head which produces a slant stream so arranged that there can be no possible pollution of the water which the child drinks. This new type of head is manufactured exclusively by the Rundle-Spence Manufacturing Company, Milwaukee, Wis., and is marketed in a number of models and is supplied with a large variety of bowls, standards, and pictures. The firm continues to manufacture its old style of standard, bubbling heads and sanitary drinking fountains, and both the new and the old are included in a new Catalog "C" just issued for school authorities.

It is rather interesting to know that the new types of slant stream drinking heads were designed by experts in hygiene and have been tested in the bacteriological laboratories of the University of Wisconsin, University of Minnesota, and the University of Iowa, and have been found entirely germ-proof.

OFFERS MATERIAL.

Community Service, I. N. C., 1 Madison Ave., New York, has drawn up suggestions for the use of committees who desire to undertake celebrations in honor of the 300th Anniversary of the Landing of the Pilgrims. School authorities who desire to obtain copies for use in preparation of plays, pageants, tableaus, recitations and ceremonials, may obtain copies without cost.

Useless.

"Ma," said a discouraged little Maple avenue urchin. "I ain't going to school any more."

"Why, dear?" tenderly inquired the mother.

"'Cause 'tain't no use. I can never learn to spell. The teacher keeps changing words on me all the time."

Drawing the Line.

"Who is the citizen in overalls posing before a battery of cameras?"

"The principal of our local high school."

"Didnt he just now spurn some kind of a tool offered him by a spectator?"

"Yes. It was a wrench. He says he has not yet reached the point of affluence where he's willing to be mistaken for a \$12-a-day plumber."

School Goods Directory

ADJUSTABLE WINDOW SHADES

Oliver C. Steele Mfg. Co.
L. O. Draper Shade Co.
Aeroshade Company
Walger Awning Co.
Athey Company
Forse Manufacturing Co.

AIR CONDITIONING APPARATUS

American Blower Co.
Moline Heat

ASH HOISTS

Gillis & Geoghegan
F. S. Payne Company

AUDITORIUM SEATING

Peabody School Furniture Co.
American Seating Co.
N. J. School Furniture Co.
Heywood Bros. & Wakefield Co.
Empire Seating Co.
Theo. Kundts Co.

BLACKBOARDS—COMPOSITION

N. Y. Silicate Book Slate Co.
Beaver Board Companies
E. W. A. Rowles Co.
Weber Costello Co.

BLACKBOARDS—NATURAL SLATE

Keenan Structural Slate Co.
Penns. Struct. Slate Co.
Natural Slate Blackboard Co.

BOOK COVERS

Holden Patent Book Cover Co.
BOOK PUBLISHERS

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Gregg Publishing Company
D. C. Heath & Co.
Hinds, Hayden & Eldredge, Inc.
Isaac Pitman & Sons
Silver, Burdett & Co.
American Book Co.
A. N. Palmer Co.
Ginn & Company
Educational Publishing Company
J. B. Lippincott Co.
Laird & Lee, Inc.

BRUSHES

Theo. B. Robertson Products Co.
BUILDING PRODUCTS

Asbesto-Crete Buildings Co.

CAFETERIA EQUIPMENT

Albert Pick & Co.

CHARTS

Weber Costello Co.
A. J. Nystrom & Co.

CHEMICAL CLOSETS

Dall Steel Products Co.
Chemical Toilet Corporation
CLOCKS

Standard Electric Time Co.

CRAYONS

Binney & Smith
American Crayon Co.
E. W. A. Rowles Co.
Weber Costello Co.
National Crayon Co.

DESK SURFACING MACHINE

Waywell, Chappell & Co.

DESK RENOVATORS

National Wood Renovating Co.

DICTIONARY STANDS

Union School Furnishing Co.

DIPLOMAS

W. M. Welch Mfg. Co.
Metropolitan Supply Co.
Educational Supplies Co.

DISINFECTANTS

Theo. B. Robertson Products Co.

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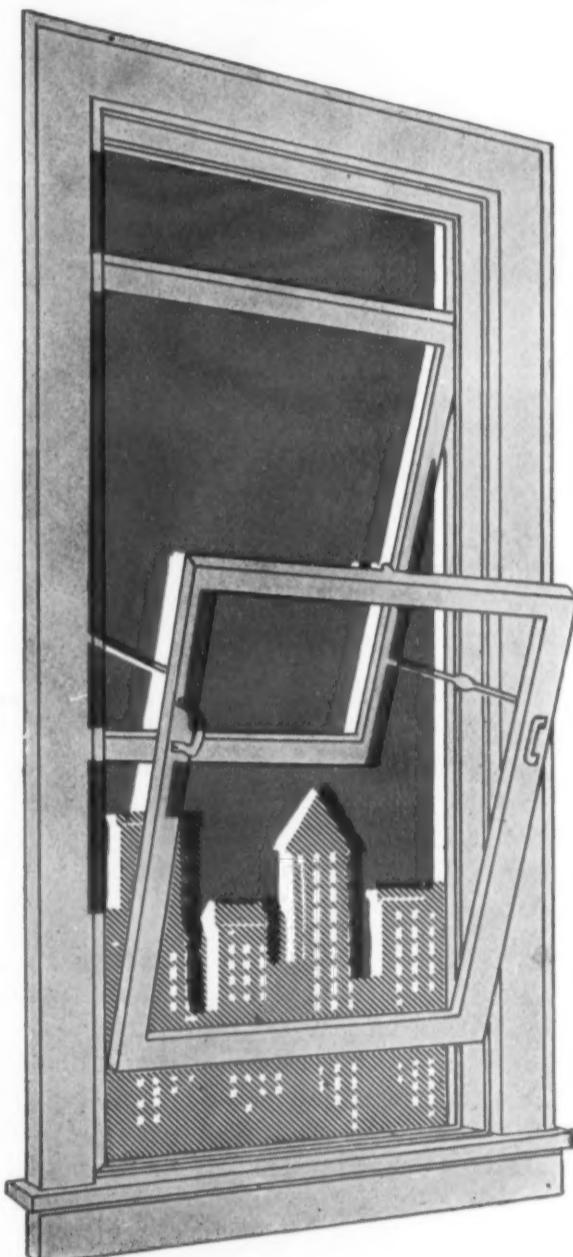
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